

SAFETY, SERVICE AND FINANCIAL RESPONSIBILITY

# FY2017 PROPOSED BUDGET

EFFECTIVE JULY 1, 2016



FOCUSING ON THE CUSTOMER



WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY



Fiscal Year 2017 Proposed Budget

*Prioritizing Safety, Service Reliability, and Financial Responsibility*

**General Manager's Message**

---



As I reach out across the region in my new role as Metro's Chief Executive, I am privileged to meet and hear from our many, diverse stakeholders: Metro riders, employees and union leaders, our jurisdictional partners and funders, oversight authorities, community leaders, and so many others.

It is clear that our region expects and deserves a world class transit system with the highest safety culture. The system must also provide frequent, reliable service to customers and be supported by adequate funding and sound financial management. Delivering on these expectations will be my top priorities.

This proposed budget is a good beginning, and it will be refined going forward as we reexamine Metro's challenges, resources and management in the context of the region's needs. Our vision and business plan will incorporate the result of an on-going efficiency analysis and will build upon the hard work of our employees. In the meantime, the FY2017 proposed budget provides a good foundation for future actions that reinforce my core priorities of safety first, service reliability, and responsible fiscal management.

The proposed budget funds important safety investments, including full compliance with the 91 corrective actions required by the Federal Transit Administration's (FTA) Safety Management Inspection (SMI) report, as well as National Transportation Safety Board (NTSB) recommended projects. Other key safety investments include the installation of a new rail radio system and continuation of Metro's fatigue management system for safety sensitive positions.

Very importantly, the proposed budget takes steps to refocus on our customers with proposed actions that recognize that we are working to improve service and want to regain their confidence along the way, as well as attract even more riders. A new pass is designed to attract more college students during off-peak times, and current rail riders will find that existing Metrorail passes will be more attractive with new, unlimited access to Metrobus at no additional charge. We have also proposed a 15-minute "grace period" so riders who quickly enter and exit a station, particularly during a service disruption, will not be charged.

For Metrorail, we will continue our railcar modernization with the scheduled delivery of 168 new 7000 series railcars in FY2017, which will greatly improve reliability and the customer experience. We will also upgrade infrastructure at Metro's Rail Operations Control Center and launch a modern customer contact center to better engage our customers through digital media.

Finally, we have proposed a balanced operating budget for FY2017 without raising fares for customers, reducing service, or increasing support from jurisdictions. I look forward to working with the Board, our customers and our funding partners to finalize the budget in the coming months. I know we are all united behind improving Metro's safety and service in the most financially responsible way.

Paul J. Wiedefeld  
Chief Executive Officer

## WMATA Board of Directors

---

The Washington Metropolitan Area Transit Authority is governed by a 16-member Board of Directors composed of eight Principal and eight Alternate members. The District of Columbia, Maryland, Virginia and the federal government each appoint two Principal and two Alternate members. Below are the members currently serving on the Board.



Mortimer L. Downey, Chair, joined the Board in January 2010 as the first member appointed by the federal government. He served as the Deputy Secretary of Transportation from 1993 to 2001. Since 2001, he has been a transportation consultant, working on a wide variety of institutional, financial and organizational issues.



Michael Goldman, First Vice Chair, was appointed to the Board in June 2013 as a Principal Director representing the State of Maryland. Mr. Goldman has practiced in the areas of international, antitrust and transportation law.



Catherine Hudgins, Second Vice Chair, joined the Board in January 2004 as an Alternate Director. She was appointed as Principal Director in 2008 representing Fairfax County, Virginia. Mrs. Hudgins was first elected to the Fairfax County Board of Supervisors in November 1999.



Jack Evans was appointed to the Board as a Principal Director in January 2015 representing the District of Columbia. Mr. Evans has served on the Council of the District of Columbia (Ward 2) since 1991.



Harriet Tregoning joined the Board in November of 2014 as a Principal Director representing the federal government. She is currently the Director of HUD's Office of Economic Resilience. She is also the former director of the District of Columbia's Office of Planning.



Keturah Harley was appointed to the Board as a Principal Director in April of 2015 representing Maryland. She has worked in the federal government as an Appellate Litigation Attorney at the U.S. Department of Veterans Affairs and with the District of Columbia Public Employee Relations Board (PERB), where she served as General Counsel and Executive Director (Acting).





Jim Corcoran was appointed as a Principal Director to the Board in February 2015 representing the Commonwealth of Virginia. Since April 2010, he has served as President & CEO of the Fairfax County Chamber of Commerce. Under Mr. Corcoran's leadership, the Chamber is the preeminent Northern Virginia membership organization for businesses.



Corbett A. Price was appointed to the Board in March 2015 as a Principal Director representing the District of Columbia. He currently serves as Chairman and CEO of Quantix Health Capital, LLC.



Anthony R. Giancola, P.E. joined the Board in February 2007 as Alternate Director representing the District of Columbia and was designated an Alternate Director for the federal government in April 2011. From 1993 to 2011, Mr. Giancola served as the Executive Director of the National Association of County Engineers.



Kathy Porter joined the Board in January 2011 as an Alternate Director from Montgomery County, Maryland. She was Mayor of the City of Takoma Park, Maryland, from 1997 to 2007.



William D. Euille joined the Board in July 2000 as Alternate Director representing the City of Alexandria, Virginia. Mr. Euille is currently the Mayor of Alexandria, and he has served on the Alexandria City Council since May 1994.



Tom Bulger was appointed to the Board in July 2011 as an Alternate Director for the District of Columbia. He is President of Government Relations Inc., and has been a federal advocate and policy consultant.



Anthony E. Costa joined the Board in July 2014 as an Alternate Director representing the federal government. He is currently Senior Advisor to the Administrator of the General Services Administration (GSA) and is leading GSA's efforts to help direct federal real estate activities to encourage the provision of environments where communities and employees can live, work and thrive.



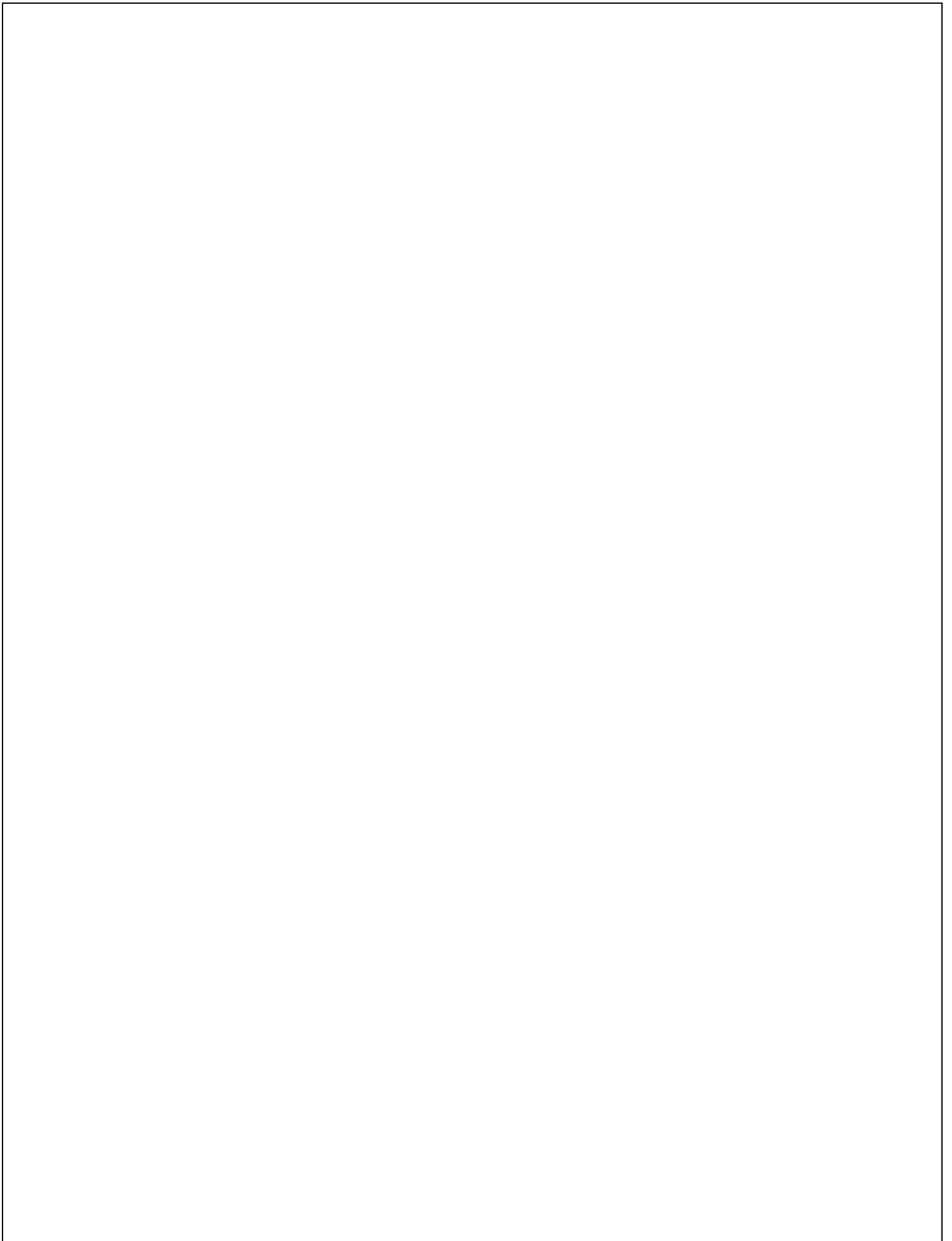
Malcolm Augustine joined the Board in July of 2015 as an Alternate Director for Prince George's County. With over twenty years of experience, Mr. Augustine is a seasoned multi-channel marketing, sales, analytics and customer relationship executive in the direct marketing sector with specialty in higher education, non-profit, and healthcare.



Mary Hynes was appointed by the Northern Virginia Transportation Commission to the Board in January 2011 as a Principal Director, and currently serves as a Virginia Alternate Director representing Arlington. She was first elected to the Arlington County Board in November 2007.



Leif A. Dormsjo joined the Board in March of 2015 after being appointed as an Alternate Director representing the District Department of Transportation (DDOT). Prior to becoming DDOT Director, Mr. Dormsjo served as Deputy Secretary of the Maryland Department of Transportation (MDOT).



---

## Table of Contents

Chapter I. Introduction to Metro .....	I-1
FY2017 Executive Summary .....	I-12
Chapter II. FY2017 Proposed Budget.....	II-1
Chapter III. FY2017 Proposed Operating Budget .....	III-1
Chapter IV. FY2017 Proposed Capital Budget.....	IV-1
Appendix A Capital Program .....	A-1
Appendix B Human Capital Summary .....	B-1
Appendix C Budget Process .....	C-1
Appendix D Financial Standards .....	D-1
Appendix E Debt Service.....	E-1
Appendix F Operating Statistics .....	F-1
Appendix G Glossary of Terms .....	G-1
Appendix H Glossary of Acronyms and Abbreviations .....	H-1



---

# Chapter 1 - Introduction to Metro



*7000 Series Railcars at Metro Center*



---

## Metro Profile

### *History in Brief*

WMATA was created in 1967 by an interstate compact as a tri-jurisdiction operation between Maryland, Virginia and the District of Columbia. Construction of the Metrorail system began in 1969 and the first phase of Metrorail operation began in 1976.

Metro added a second transit service to its network in 1973 when, under direction from the U.S. Congress, it acquired four area bus systems and created Metrobus.

In 1994, Metro added a third transit service when it began providing MetroAccess, a paratransit service for people with disabilities unable to use fixed route transit service.

Metro completed the originally planned 103-mile Metrorail system in early 2001. In 2004, Metro expanded the system, opening the Blue Line extension to Largo Town Center as well as the New York Ave-Florida Ave-Gallaudet U station (now NoMa-Gallaudet U station) on the Red Line. The expansion increased the Metrorail system to 86 stations and 106 miles.

In March 2009, the Dulles Transit Partners (DTP), under the direction of the Metropolitan Washington Airports Authority (MWAA), started construction on the Silver Line, a 23-mile rail extension in Fairfax and Loudoun counties in Virginia. Funded by a full-funding grant agreement, toll revenues, and other revenues from funding partners, the first phase of 11.6 miles and five new stations extending service to Reston, Virginia, opened July 26, 2014. Phase 2, an additional 11.4 miles with six new stations, will provide service to Dulles International Airport and Loudoun County. Construction on Phase 2 is expected to be complete in 2019. The Silver Line is the largest rail expansion project since the opening of the National Airport to Stadium-Armory segment in 1977.

### *Metro Facts*

- Metro maintains the second largest heavy rail system, the fifth largest bus system and the fifth largest paratransit service in the nation.
- Metro's service area size is approximately 1,500 square miles with a population of approximately four million people.
- Metro's transit zone consists of the District of Columbia, the suburban Maryland counties of Montgomery and Prince George's and the Northern Virginia counties of Arlington, Fairfax and Loudoun and the cities of Alexandria, Fairfax and Falls Church. Known as "America's Transit System," average weekday passenger trips on Metrorail, Metrobus, and MetroAccess total approximately 1.1 million.
- More than half of Metrorail stations serve federal facilities, and over a third of Metrorail trips on an average weekday are taken by federal employees.
- Metro has spurred over \$235.0 billion of economic development at or adjacent to Metro property.

---

## ***Metrorail***

The Metrorail system is a rapid transit system that consists of 118 route miles, 91 passenger stations and a fleet of over 1100 rail cars. Service is operated 5 AM to midnight Monday through Thursday, 5 AM to 3 AM on Fridays, 7 AM to 3 AM on Saturdays, and 7 AM to midnight on Sundays. In FY2017, Metrorail is projected to provide approximately 201 million passenger trips. The system is comprised of three main types of structures: underground, surface and elevated. The underground sections consist of 50.5 route miles and 47 stations, the surface sections comprise 58 miles and 38 stations, and the elevated sections consist of 9.2 route miles and 6 stations. While there are three types of structures, they operate as one unified system providing seamless service to passengers.

The system is equipped with communication systems that facilitate the flow of information to and from the passenger. All stations are equipped with digital signs that show next train arrival times, system status and time of day. The system operations control center is equipped with two-way radios for communication with all train operators in service, as well as hotlines to the police and fire departments in all of the jurisdictions served by Metro. Public address systems on all trains and platforms facilitate communications from Metrorail train operators and station managers. Also, passenger-to-train operator intercoms are located inside all rail cars, one at each end, and there are passenger-to-station manager intercoms on all station platforms and landings and in all elevators. The upcoming radio infrastructure renewal and cellular communications project will upgrade Metro to a 700 MHz radio system and provide cellular capability throughout the tunnels.

Metrorail service is currently operated over six lines: Blue, between Franconia-Springfield and Largo Town Center; Green, between Branch Avenue and Greenbelt; Orange, between New Carrollton and Vienna; Red, between Glenmont and Shady Grove; Yellow, between Huntington and Fort Totten; and Silver, between Wiehle-Reston East and Largo Town Center. All Metrorail stations and railcars are accessible to disabled passengers.

### ***Sequence of Metrorail Openings***

The first Metrorail line opened was the Red Line consisting of 4.5 miles from Farragut North to Rhode Island Avenue. By July 1977, the Blue and Orange Lines were added with service between National Airport and the Stadium-Armory. This added 11.8 miles and 17 new stations to Metro's rail operation. With continued development, in 1983 the Yellow line was added with service from Gallery Place-Chinatown to the Pentagon, adding 3.3 miles and one station. In 1991, the Green Line was added providing service from Gallery Place to U St/African-American Civil War Memorial/Cardozo. In 2001, the Green Line was extended to Branch Avenue, and in 2004, the Blue Line was extended to Largo Town Center along with the opening of the NoMa-Gallaudet Station on the Red Line. Table 1.1 provides a list of all openings.

Line	Segment	Stations	Miles	Date
Red	Farragut North to Rhode island Ave	5	4.5	3/29/1976
Red	Gallery Pl-Chinatown	1	none	12/15/1976
Red	To DuPont Circle	1	1.1	1/17/1977
Blue/Orange	National Airport to Stadium-Armory	17	11.8	7/1/1977
Red	To Silver Spring	4	5.7	2/6/1978
Orange	To New Carrollton	5	7.4	11/20/1978
Orange	To Ballston- MU	4	3.0	12/1/1979
Blue	To Addison Road	3	3.6	11/22/1980
Red	To Van Ness- UDC	3	2.1	12/5/1981
Yellow	Gallery PL - Chinatown to Pentagon	1	3.3	4/30/1983
Blue	To Huntington	4	4.2	12/17/1983
Red	To Grosvenor	5	6.8	8/25/1984
Red	To Shady Grove	4	7.0	12/15/1984
Orange	To Vienna/Fairfax-GMU	4	9.1	6/7/1986
Red	To Wheaton	2	3.2	9/22/1990
Green	To U St/African-Amer Civil War Memorial/Cardozo	3	1.7	5/11/1991
Blue	To Van Dorn Street	1	3.9	6/15/1991
Green	To Anacostia	3	2.9	12/28/1991
Green	To Greenbelt	4	7.0	12/11/1993
Blue	To Franconia-Springfield	1	3.3	6/29/1997
Red	To Glenmont	1	1.4	7/25/1998
Green	Columbia Heights to Fort Totten	2	2.9	9/18/1999
Green	To Branch Ave	5	6.5	1/13/2001
Red	New York Avenue	1	0.0	11/20/2004
Blue	To Largo Town Center	2	3.2	12/18/2004
Silver	To Wiehle-Reston East	5	11.6	7/26/2014

### ***Vertical Transportation***

Metrorail's design places high reliance on vertical mobility through the utilization of elevators and escalators. Customers access Metrorail via escalators to the train platform, while elevators provide an accessible path of travel for persons with disabilities, seniors, customers with strollers, travelers carrying luggage and other riders.

Metro is the single largest vertical transportation operator in North America. Metro operates more than 900 vertical transport facilities (613 escalators and 313 elevators) and delivers over 3 million trips each weekday. This includes the five new stations on the Silver line (27 escalators and 28 elevators) which began service on July 26, 2014. The Wheaton Station on the Red Line has the longest escalator (230 feet long) in the Western Hemisphere. The Forest Glen Station, also on the

Red Line, is the deepest station in the system (196 feet or 21 stories below street level) with high speed elevators that take less than 20 seconds to travel from the street to the platform.

### ***Metrobus***

Metrobus operates bus service on 175 lines with 299 route variations covering over 280 linear miles of services throughout ten jurisdictions in the Metro region. Weekday ridership ranges between 428,000 and 480,000 riders utilizing 11,051 bus stops supported by 2,554 shelters owned by 15 separate agencies. All buses are accessible to people with disabilities and bike racks are available for use on all buses. The entire bus fleet is equipped with two-way radio links to the operations control center, emergency radio silent alarms, and automatic vehicle locators.

The Next Bus service provides customers information on Metrobus arrival times at a particular bus stop. It uses satellite technology to find specific locations of a bus and sends the estimated arrival time of the bus to customers via mobile devices. In addition, security cameras are installed on all Metro buses. Currently, the fleet is comprised of 1,548 buses to support maintenance of the fleet and meet peak weekday service requirements of 1,294 buses with varying sizes and capacities. In FY2017, approximately 136 million trips are projected to be taken on Metrobus.

### ***MetroAccess***

The Department of Access Services ensures the ongoing accessibility of Metrobus and Metrorail for customers with disabilities, and in accordance with the Americans with Disabilities Act (ADA), provides MetroAccess paratransit service as a “safety net” for those who are unable to use bus and rail. MetroAccess, a shared ride, door-to-door service, is offered for the same days, hours, and locations as fixed-route transit, using a fleet of 675 vehicles. In 2013, MetroAccess transitioned to a new business model in which service was unbundled from a single-contractor operation. Three contractors operate the van service, while separate contractors manage the Operations Control Center and Quality Assurance functions. The new model has given Metro more agility and control in managing the service with greater efficiency and lower cost.

MetroAccess, the nation’s fifth largest paratransit service, provides over two million trips each year. Demand for this type of service is increasing, as the population of people with disabilities is growing in the region and nationwide. For this reason, it is critical for Metro to accommodate as many customers as possible on its fixed-route services, and thanks to Metro’s free ride benefit, over 2.2 million fixed-route trips are taken by MetroAccess customers each year. For those who have not used fixed-route transit, Access Services provides travel training to assist customers with disabilities in navigating our system and taking full advantage of our many accessibility and safety features. MetroAccess partners with Metrobus and Metrorail to provide group orientations and helps organizations become more self-sufficient in serving their clients through Train-the-Trainer workshops. These popular workshops educate organizations on how to provide travel training to their unique clientele. This not only helps organizations assist their clients to be more independent, but also serves as a force multiplier for our travel training team. Additionally, Access Services is partnering with the jurisdictions to improve the accessibility of bus stops in the region that will further enhance the customer’s ability to make use of the fixed-route system.



To keep MetroAccess sustainable for future years, Access Services has embarked on a campaign to improve regional coordination of specialized transportation services, recognizing that the most efficient and cost-effective ways to deliver specialized transportation are through alternatives to ADA paratransit. Access Services developed pilot projects with jurisdictions to explore and advance these alternatives. The first pilot was launched in partnership with the State of Maryland in Montgomery County and lasted from October 2013 until June 2015, and reduced the State's costs for human service agency clients who would have otherwise used MetroAccess. A second pilot in Maryland is currently underway in Prince George's County that is expected to end in February 2016, at which point State officials will review the results.

In October 2014, the Transport DC pilot was launched in the District of Columbia using taxis to provide trips for MetroAccess customers who live and travel in the District. Preliminary results have been positive, providing over 48,000 trips as an alternative to MetroAccess in the first year. Given the inevitable increases in ridership that come with an increasing population of senior citizens and people with disabilities, MetroAccess will be able to remain sustainable only by partnering with human services agencies and other transportation providers.

## **Oversight**

Metro oversight is provided by a variety of internal and external offices, committees, and administrations; these oversight entities include but are not limited to the Federal Transit Administration (FTA), the Office of Inspector General (OIG), the Office of Internal Compliance and Control (OICC). Each entities oversight responsibility is described below:

### ***Federal Transit Administration***

The Federal Transit Administration is an agency within the United States Department of Transportation that provides financial and technical assistance to local public transit systems.

The Federal government, through the FTA, provides financial assistance to develop new transit systems and improve, maintain, and operate existing systems. FTA provides and monitors grants to state and local transit providers, primarily through its ten regional offices. These grantees are responsible for managing their programs in accordance with Federal requirements, and FTA is responsible for ensuring that grantees follow Federal mandates along with statutory and administrative requirements.

On October 9, 2015, FTA assumed the safety oversight responsibilities of the Tri-State Oversight Committee (TOC) which was originally created by state-level agencies in Virginia, Maryland and the District of Columbia to jointly oversee rail safety and security at Metro.

### ***Metro Office of the Inspector General***

The Office of Inspector General, authorized by the Metro Board of Directors in April 2006, supervises and conducts independent audits, investigations, and reviews of Metro programs and

operations to promote economy, efficiency, and effectiveness, as well as to prevent and detect fraud, waste, and abuse in such programs and operations.

### ***Office of Internal Compliance & Control***

The Office of Internal Compliance & Control (OICC) assists in the design and monitoring of financial management controls to assure broad organizational compliance with business processes and procedure through internal control guidance and training, as well as value-added assessments of financial reporting and operational risks. The OICC partners with departments to review and evaluate business processes efficiency and effectiveness.

### **Advisory**

Metro has three primary advisory organizations: the Riders' Advisory Council (RAC), the Accessibility Advisory Committee (AAC), and the Jurisdictional Coordinating Committee (JCC). These advisory entities focus on specific issues as described below:

#### ***Riders' Advisory Council***

On September 22, 2005, the Metro Board established a Riders' Advisory Council. The Council allows Metro customers an unprecedented level of input on bus, rail and paratransit service. The 21-member council includes six representatives from Maryland, Virginia, and the District of Columbia, two at-large members, and the chair of Metro's Accessibility Advisory Committee.

#### ***Accessibility Advisory Committee***

Metro's Accessibility Advisory Committee was created to address the needs of senior citizens and customers with disabilities. Its efforts have resulted in numerous service upgrades including gap reducers, which make it easier for customers who use wheelchairs to board Metrorail trains.

#### ***Jurisdictional Coordinating Committee***

The Jurisdictional Coordinating Committee (JCC) consists of staff members from the jurisdictions supporting Metro. The JCC was established by the Board of Directors to facilitate the exchange of information between jurisdictions and Metro staff. Meeting agendas are established by Metro staff and the JCC chairman and include items referred by the Board or Metro staff, as well as items requested by JCC members.

### **Regional Transit Planning**

The Washington Metropolitan Area encompasses over 4,000 square miles in the District of Columbia, suburban Maryland and Northern Virginia, and the region is home to almost six million people and over three million jobs. In FY2017, region-wide ridership on Metrorail, Metrobus and MetroAccess is budgeted at approximately 350 million trips.

Metro, as the primary transit operator providing service across jurisdictional boundaries, is an integral member of the regional transportation planning process. Article VI of the Metro Compact gives Metro the power to adopt a Mass Transit Plan for the Metro service zone and directs Metro to participate in the region's continuous, comprehensive transportation planning process. Metro's regional planning function encompasses the preparation of transit system plans in partnership with other regional transit providers, conducting system-planning analysis and transportation studies, communication of transit needs to regional planning bodies, and participation in planning processes at the regional and sub-regional levels. Metro has a particular responsibility to ensure that the region's transit provider's needs, both capital and operating, are reflected during the establishment of the Mass Transit Plan and that the region achieves a balanced system of transportation.

Metro coordinates with its regional partners to determine transit-based priorities and projects. The Metro Board of Directors, composed of members from the Compact jurisdictions, helps determine those priorities and provides policy direction. The Jurisdictional Coordinating Committee (JCC) brings together jurisdictional staff to coordinate on various budget and operational issues in conjunction with Board Committee meeting schedules. Internal planning and programming are designed to work within this institutional framework.

The National Capital Region Transportation Planning Board (TPB) is the federally designated Metropolitan Planning Organization (MPO) to coordinate transportation planning and funding for the Washington region. The TPB serves as a forum for the region to develop transportation plans, policies and actions, and to set regional transportation priorities through the Constrained Long Range Plan (CLRP) and the six-year Transportation Improvement Plan (TIP). The TPB also provides technical resources for planning and policy making. Metro is one of the implementing agencies in the TPB planning process and is a voting member of the TPB. Metro is also an active member of the TPB Technical Committee and several subcommittees such as Travel Forecasting, Bicycle and Pedestrian, Regional Bus, Regional Transportation Demand Management (TDM) Marketing, and Human Services Subcommittee.

In addition to activities at the TPB, Metro coordinates with jurisdictional partners in multiple venues. The Northern Virginia Transportation Authority (NVTA) is responsible for developing a Northern Virginia Regional Transportation Plan, allocating transportation funds and providing interagency coordination in Northern Virginia. The Northern Virginia Transportation Commission (NVTC) coordinates transit finance and operations in Northern Virginia. Metro works with both NVTA and NVTC on important transit funding and corridor development initiatives to enhance public transit service and ensure integration of transit in highway investments. Metro also works with Departments of Transportation (DOT) and planning staffs in the District of Columbia, Maryland, and Virginia on important local plans and project development initiatives to enhance public transit service and ensure integration of transit with roadway investments.

---

## Demographics

Based on the 2010 Census, the population of the Compact jurisdictions currently served by Metro totals 3.9 million people across four counties (Montgomery and Prince George's in Maryland, Fairfax and Arlington in Virginia), three independent cities (Alexandria, Falls Church, and Fairfax in Virginia), and one federal district. This constitutes the core of the Washington Metropolitan area, the ninth largest metropolitan area of the country.

Based on the 2011 American Community Survey (ACS), the demographic profile of the Washington Metropolitan area is as follows:

- 48.2 percent of the population is non-Hispanic white
- 25.3 percent is black or African American
- 14.1 percent is Hispanic or Latino
- 9.3 percent is Asian
- 3.1 percent is Mixed-Other

## Economy

Located in the nation's capital, Metro's operations are directly influenced by the economic conditions of the District of Columbia (DC) and the surrounding jurisdictions of Maryland and Virginia, and overall trends in the Authority's transit ridership are correlated with population and employment growth in DC and the region. Over the past two to three years, the region's economy has underperformed most other metro areas in the country as a result of the fiscal drag from reduced federal government spending and employment, including the impacts of sequestration, drawdown of overseas military engagements, and the retirement of older federal employees. The current economic underperformance is impacting not just transit ridership, but office and commercial vacancy rates, local jurisdictional tax revenues, and overall incomes in the region.

***Strengths and weaknesses:*** The long-term outlook for population growth in both DC and the region as a whole remains positive, particularly as revitalized downtown neighborhoods continue to draw young professionals. The region boasts a highly educated workforce that commands above-average salaries, and employment continues to grow in non-government sectors such as technology, healthcare, and education as the region becomes a hub for the east coast of the United States. DC also benefits from a steady supply of tourists to the nation's capital, as well as convention and business visitors. Residential construction has moderated after several years of rapid growth, particularly in the multifamily segment, but the real estate market overall remains strong. The region's weaknesses include relatively high business and regulatory costs as well as income inequality and a high cost of living, but the greatest risk currently facing the region is the reliance on the federal government.

***Reliance on federal government:*** The economies of the District of Columbia and the Washington region remain heavily dependent on federal government spending. Although the region performed well in the years immediately after the 2007-09 financial crisis and recession, since 2012 the region's economic picture has clouded as a result of sequestration and repeated federal budget

---

crises and shutdowns. The reliance on the federal government is playing out in a number of related dimensions for the Authority:

- *Overall federal employment:* One of the primary reasons for creating the Metrorail system in the 1970s was to provide commuting options for federal employees and contractors, particularly from park-and-ride locations outside of the downtown core. This has remained a primary peak-hour market served by Metrorail, but as those federal employee and contractor jobs have declined, ridership has also been negatively impacted.
- *Federal transit benefit:* Given Metro's relatively high rail fares, the monthly transit benefit offered by many employers in the region is important in reducing the out-of-pocket cost of commuting. When the transit benefit was reduced to \$130/month in 2014, while the federal parking benefit remained at \$250/month, this negatively impacted Metrorail ridership by changing the 'rail vs. driving' decision for some commuters. The Authority, in cooperation with other major transit agencies, has been working with key elected officials to bring the transit subsidy back to parity with the parking subsidy.
- *Telecommuting:* Federal agencies have offered telecommuting options as a benefit to their employees for many years. Recently, however, the federal government (through the General Services Administration and the Office of Personnel Management) is implementing stronger telecommuting requirements on agencies in order to reduce real estate costs. The telecommuting requirements reduce trip-taking by employees on all modes, including Metrorail and Metrobus.

---

## Executive Summary

Metro's proposed \$3.1 billion total budget for FY2017 – including the Operating, Capital and Reimbursable budgets – funds transit services that provide over 1.1 million trips each weekday. The budget enables Metro to continue its vital safety and state of good repair rebuilding effort, enhance service delivery for its customers, and constrain cost growth through effective management.

The net operating portion of Metro's overall budget is \$1.74 billion, which provides for the personnel, supplies, fuel and propulsion power, and services needed to operate Metrobus, Metrorail, and MetroAccess. Funding for the operating budget comes primarily from passenger fares and contributions from Metro's state and local government partners.

The reimbursable portion of Metro's overall budget is \$195 million for both operating and capital, which provides for personnel and services needed for unique projects requested on behalf of Metro's jurisdictions and outside partners, including the DC Circulator and support for the construction of the Silver Line Phase II. The proposed operating reimbursable budget is \$34.2 million and the capital reimbursable budget is \$160.5 million.

The proposed FY2017 capital budget of \$1.1 billion provides for the assets and infrastructure to support Metrobus, Metrorail, and MetroAccess service. Funding for the capital budget comes from federal grants, Metro's state and local government partners, and debt. The Capital Improvement Program (CIP) also includes an approved investment of 748 new 7000-series railcars, enough to replace all 1000, 4000 and 5000-series cars and expand the size of the Metro fleet by 156 cars. The additional cars support the Silver Line extension and provide an additional 28 cars that are currently planned to be used to increase service along the Red Line.

Priorities for the FY2017 budget include business initiatives to achieve the Board's strategic goals. Most importantly, the proposed budget includes no fare increase, no service reductions, and no increases in jurisdictional operating subsidy.

### Budget Highlights:

- The \$1.7 billion operating budget is funded with passenger fares and parking (48 percent), State and Local Government subsidy contributions (49 percent) and other revenue sources (three percent). The Operating budget supports Metrobus, Metrorail, and MetroAccess operations across the District of Columbia, Maryland, and Virginia
- The Operating budget represents a \$79 million or 4.3 percent decrease over FY2016 levels. The majority of the decrease is due to reduced spending support in the operating budget for FTA eligible preventive maintenance and heavy rail overhaul labor and parts expense. These activities are continuing, but are proposed to now be funded as part of the CIP. The decrease is partially offset by contractually obligated wage adjustments as well as an increase in the paratransit contract
- Metro will expend approximately \$1.7 million in the current year (FY2016) operating budget to begin addressing FTA's Safety Management Inspection (SMI) requirements. This amount

will increase to approximately \$12 million in FY2017, with 62 new positions required across 3 major categories:

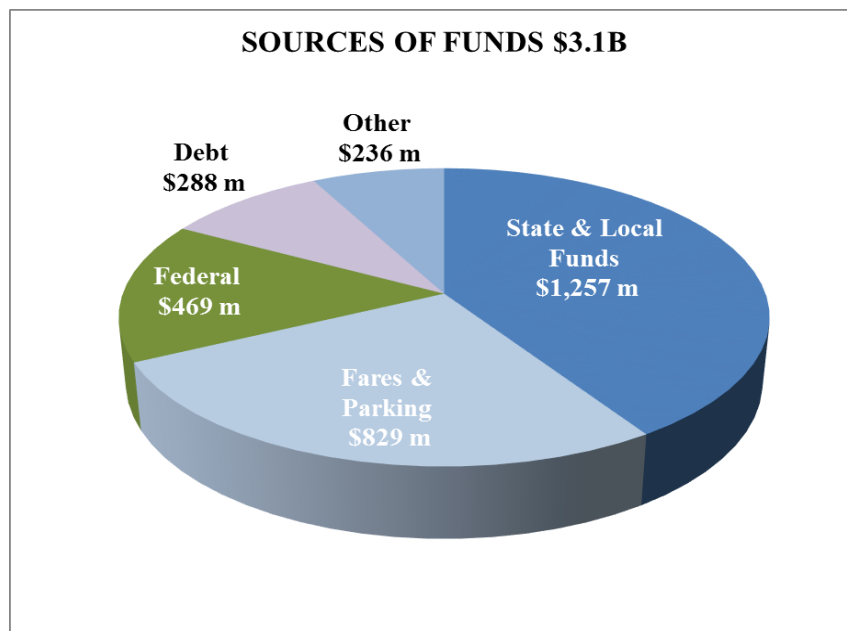
- Rail training and recertification including refresher training, emergency response formal review and emergency response training (17 positions)
- Rail system-wide maintenance including preventive maintenance and inspection testing as well as increased staffing for automatic train control (35 positions)
- Bus operational testing and compliance resources for pre-trip inspections and the bus operator performance program
- *Customer and employee safety and security improvements:* Transit Police will work throughout the system to curtail incidents of bus and rail fare evasion. Rail tours will be subject to review every 30 days to ensure productivity, and Transit Police on bus tours will report their activity to include bus number and route for tracking purposes. The 12 proposed targeted stations are Naylor Road, Pentagon, Deanwood, Anacostia, Brookland, Tenleytown, Navy Yard, Congress Heights, Takoma Station, Gallery Place, Minnesota Avenue and Judiciary Square stations.
- *Better pass products:* Proposed new Metrorail pass products are intended to encourage ridership, particularly in the off-peak periods, and generate incremental revenue.
  - The University Pass (UPass) will provide unlimited riding privileges on both Metrobus and Metrorail at discounted rates to full-time students at accredited colleges. In a pilot program, Metro and American University staff are working to implement a pass which provides students unlimited rides on Metro not MetroAccess. University students represent an untapped partnership, with 20 colleges and approximately 225,000 students in the region who can drive additional ridership.
  - The proposed Rail/Bus combo passes will provide 7-day short-trip rail pass combined with a 7-day bus pass at a discounted price.
  - The ‘name your own price’ monthly pass pilot, if approved by the Board, will allow customers unlimited access to the Metrorail system for at a price determined by each customer’s ‘normal’ daily commute, paid as a monthly subscription.
- *Fare policy changes:* In response to customer feedback following service disruptions, the budget proposes offering a credit if a customer enters and exits the same rail station within a 15 minute window.
- Implementation of Board efficiency work-plan findings with an assumed cost reduction of \$20 million in FY2017, as well as administrative expense reductions of \$2 million in addition to reductions already implemented in FY2016.
- Maximization of non-fare revenues through an additional \$5 million in advertising revenues. This incremental revenue is the result of recent actions taken by the Board to expand Metro’s advertising inventory (particularly digital screens and vehicle wraps) and to allow alcohol advertising.
- The \$1.1 billion CIP budget is focused on the implementation of federal recommendations and requirements for safety improvements, the rebuilding of the Metro system, and improving the effectiveness of the current rail and bus networks. Significant investments planned for FY2017 include, but are not limited to:
  - NTSB Recommendations and SMI Requirements which will address safety related investments including a replacement of the generation two track circuits on the rail



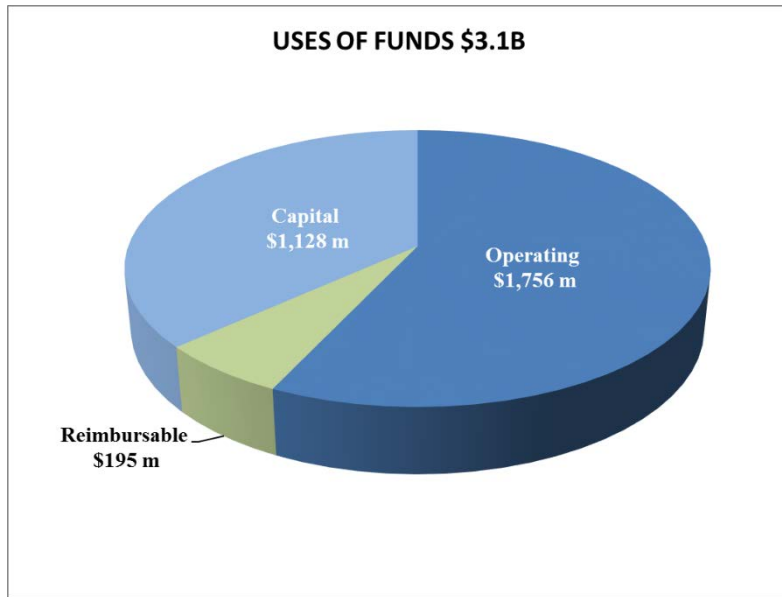
- system, as well as the development of an automated recording process which addresses maintenance and inspection activities on critical systems within the tunnels.
- The Radio & Cellular Infrastructure Renewal project which is planned to complete the design work for the above ground elements of the new 700 mhz radio system and complete installation of cable trays along the Red Line in FY2017.
  - Railcar, Bus, and Access Vehicle Replacement which will continue in FY2017 with the replacement of three hundred 1000-series railcars with the new 7000-series. Metro will also advance a MetroAccess vehicle procurement as well as the rehabilitation and replacement of the bus fleet.
  - The Track and Structures Rehabilitation program will continue to renew and replace crossties, running rail, fasteners, switches, and insulators as part of the effort to maintain a state of good repair on the system, resulting in the prevention of service delays and speed restriction.
  - The Transit Signal Priority project which will lead to faster Metrobus service by identifying key corridors where changes could be made to potentially increase bus speeds by twenty percent.
  - The Rail Power System Rehabilitation programs which will address the replacement of power system components and control rooms that are nearing the end of their useful life such as cabling, track circuits, junction boxes, switchgear, and transformers throughout the rail systems and yards.
  - The Replacement of Bus Garages with new modern facilities at Andrews Federal Campus and Cinder Bed Road.
  - The Escalator and Elevator Rehabilitation and Replacement program will continue with the replacement of twenty two escalators and rehabilitation of another ten escalators and fifteen elevators.

<b>Summary of Funding by Program and Source</b>		
(Dollars in Millions)	FY2016 <u>Approved</u>	FY2017 <u>Proposed</u>
<b>Operating Budget</b>		
• Passenger Fares & Parking	\$ 859.0	\$ 829.0
• State and Local Funds <sup>1</sup>	\$ 866.5	\$ 866.5
• Business Revenues	\$ 45.0	\$ 47.0
• Other Sources	\$ 34.0	\$ 14.0
<b>Subtotal</b>	<b>\$ 1,804.5</b>	<b>\$ 1,756.5</b>
<b>Reimbursable Budget</b>		
• State and Local Funds	\$ 26.0	\$ 26.1
• Other Sources	\$ 95.0	\$ 168.6
<b>Subtotal</b>	<b>\$ 121.0</b>	<b>\$ 194.7</b>
<b>Capital Budget</b>		
• Federal Formula/Other Grants	\$ 455.7	\$ 299.5
• Federal Dedicated Funds (PRIIA)	\$ 193.6	\$ 170.0
• State and Local Funds / Metro 2025 Investment	\$ 476.0	\$ 364.5
• Other Sources	\$ 39.9	\$ 6.6
• Planned Long-Term Financing	\$ -	\$ 287.7
<b>Subtotal</b>	<b>\$ 1,165.2</b>	<b>\$ 1,128.3</b>
<b>Total</b>	<b>\$ 3,090.7</b>	<b>\$ 3,079.5</b>

<sup>1</sup> Includes Net Subsidy and contributions for FY2016 to FY2017 Debt Service



<b>Summary of Expenditures by Program</b>			
(Dollars in Millions)	FY2016		FY2017
	<u>Approved</u> <sup>1</sup>		<u>Proposed</u>
<b>Operating Budget</b>			
• Metrobus	\$ 634.3	\$	656.8
• Metrorail	\$ 1,058.5	\$	952.9
• MetroAccess	\$ 121.2	\$	125.6
<b>Subtotal - Authorized Operating Expense</b>	<b>\$ 1,814.0</b>	<b>\$</b>	<b>1,735.3</b>
• Debt Service	\$ 21.2	\$	21.2
• Preventive Maintenance Credit <sup>2</sup>	\$ (30.7)	\$	-
<b>Subtotal- Operating Budget</b>	<b>\$ 1,804.5</b>	<b>\$</b>	<b>1,756.5</b>
<b>Reimbursable Budget</b>			
• Operating Reimbursable Projects	\$ 47.3	\$	34.2
• Capital Reimbursable Projects	\$ 73.7	\$	160.5
<b>Subtotal</b>	<b>\$ 121.0</b>	<b>\$</b>	<b>194.7</b>
<b>Capital Budget</b>			
• Capital Improvement Program <sup>3</sup>	\$ 1,165.2	\$	1,128.3
<b>Subtotal</b>	<b>\$ 1,165.2</b>	<b>\$</b>	<b>1,128.3</b>
<b>Total</b>	<b>\$ 3,090.7</b>	<b>\$</b>	<b>3,079.5</b>
<p><sup>1</sup> FY2016 figures for Operating are approved budget; figures for Capital are current forecast.</p> <p><sup>2</sup> FY2017 Preventive Maintenance expenses under Capital Improvement Program</p> <p><sup>3</sup> For the purposes of this table, Capital Reimbursable Project amounts reflect total forecasted expenditures for FY2017. Per WMATA Board policy, however reimbursable project budgets are managed on an obligation basis.</p>			



**Summary of Budgeted Positions**

	<b>FY2015 Approved Budget</b>	<b>FY2016 Approved Budget</b>	<b>FY2017 Proposed Budget</b>	<b>Change from FY2016 to FY2017</b>
Total Positions	12,905	12,995	13,054	59

## Chapter 2 - FY2017 Proposed Budget



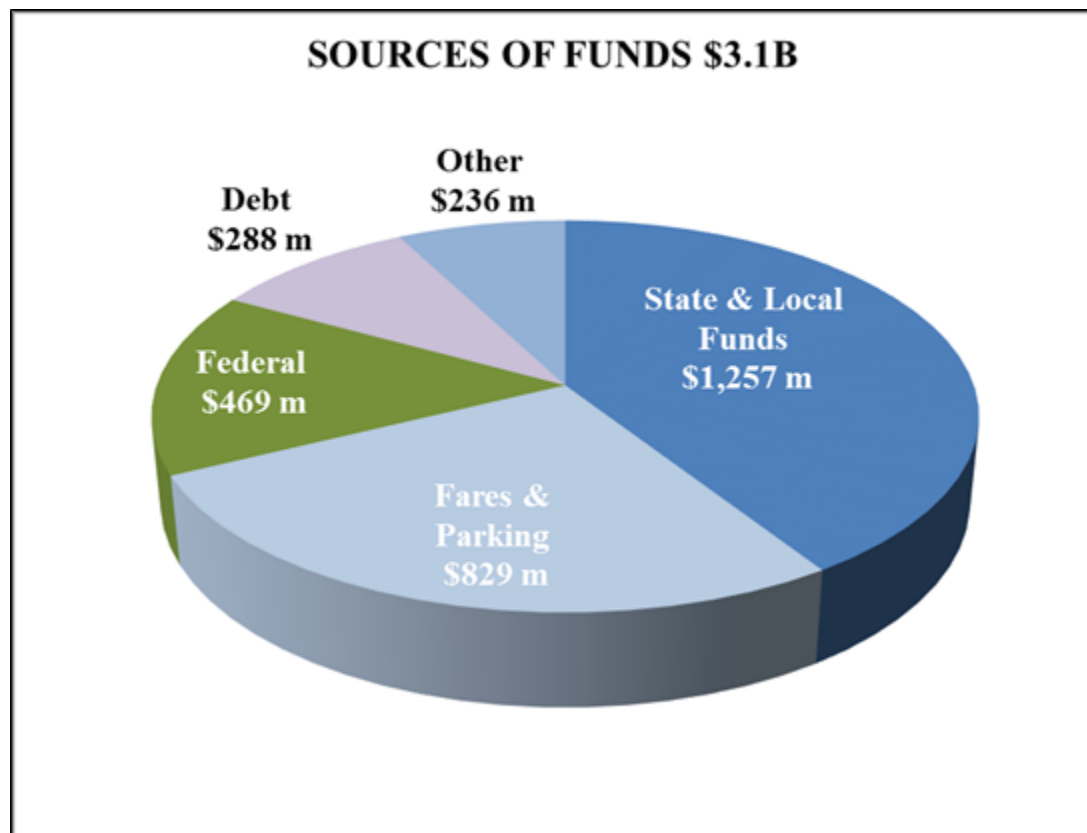
*Metrobus, 8000 Series*



## Proposed FY2017 Budget

Metro is proposing an FY2017 budget totaling \$3.1 billion, which includes the operating and debt service (\$1.8 billion), reimbursable (\$195.0 million) and capital (\$1.1 billion) budgets. The total funding for the budget is comprised of the following sources:

- Passenger fares and parking fees of \$829.0 million;
- State and local funding of \$1.26 billion, consisting of \$866.5 million of operating subsidy, \$34.2 million for reimbursable projects, and \$390.6 million in local match and system performance funds for the capital program;
- Federal funding of \$469.5 million, consisting of \$299.5 million in formula and other grants and \$170.0 million in Passenger Rail Investment and Improvement Act (PRIIA) funding, including \$21.5 million awarded in prior years;
- Planned long-term financing for the capital program of \$287.7 million; and
- Other funding, including advertising, joint development, fiber optic revenues, reimbursable funding from MWAA for the Silver Line, and other sources totaling \$236.2 million.





**Operating Revenue**

Proposed operating revenue for FY2017 totals \$890.0 million. Passenger fares and parking fees of \$829.0 million make up over 93.0 percent of the total revenue budget, but this estimate is less than the FY2016 approved budget forecast by \$30.0 million due to lower ridership on both bus and rail. Non-passenger business revenues are estimated at \$47.0 million from advertising, joint development, and fiber optic leases, as well as \$14.0 million of other miscellaneous revenues, including projected revenues from land sales and reimbursements from the State of Maryland for the new Takoma-Langley Transit Center. Other revenues were higher in FY2016 as a result of a one-time use of funds from the now-closed Transit Infrastructure Investment Fund (TIIF) to support the operating budget.

<b>Operating Revenue</b>						
<i>(\$ in Millions)</i>	<b>Actual</b>	<b>Actual</b>	<b>Approved</b>	<b>Proposed</b>	<b>Variance to FY16</b>	
	<b><u>2014</u></b>	<b><u>2015</u></b>	<b><u>2016</u></b>	<b><u>2017</u></b>	<b><u>\$ Chg.</u></b>	<b><u>% Chg.</u></b>
Passenger Fares <sup>1</sup>	\$ 754.1	\$ 793.3	\$ 810.0	\$ 782.9	(\$ 27.1)	-3%
Parking	\$ 46.6	\$ 46.5	\$ 49.0	\$ 46.1	(\$ 2.9)	-6%
Advertising	\$ 19.8	\$ 22.4	\$ 20.5	\$ 23.5	\$ 3.0	15%
Joint Development	\$ 7.4	\$ 6.2	\$ 8.0	\$ 7.0	(\$ 1.0)	-13%
Fiber Optics	\$ 15.5	\$ 15.4	\$ 16.5	\$ 16.5	\$ 0.0	0%
Other Nontransit Sources <sup>2</sup>	\$ 10.1	\$ 23.3	\$ 34.0	\$ 14.0	(\$ 20.0)	-59%
<b>Total Revenue</b>	<b>\$ 853.4</b>	<b>\$ 907.2</b>	<b>\$ 938.0</b>	<b>\$ 890.0</b>	<b>(\$ 48.0)</b>	<b>-5%</b>

<sup>1</sup> Includes DC school subsidy and Anacostia transfer programs.

<sup>2</sup> Interest, employee parking, bicycle lockers, vending machines, Neutral Host, ATMs, antennas, car sharing, other. For FY2016, also includes one-time usage of \$27 million of Transit Infrastructure Investment Fund (TIIF) revenue to support Metrorail operating expenses

## Ridership and Passenger Revenue

The proposed FY2017 budget uses the FY2016 approved ridership as a baseline, modified for the anticipated ridership impacts of policy decisions regarding fares and service as well as external factors that affect passenger trip-making. Total rail ridership is projected at 201.5 million trips, a decline of 8.4 million or 4.0 percent compared to the approved FY2016 level. Total bus ridership is projected at 135.6 million, a decline of 4.5 million or 3.2 percent compared to FY2016. These projections have been lowered as a result of the performance seen to date in FY2016. MetroAccess ridership, by contrast, is expected to continue to grow, increasing to 2.44 million in FY2017, an increase of 4.5 percent.

<b>Ridership by Service</b>						
<i>(Trips in thousands)</i> <sup>1</sup>	<b>FY2014</b>	<b>FY2015</b>	<b>FY2016</b>	<b>FY2017</b>	<b>Variance to FY16</b>	
	<u>Actual</u>	<u>Actual</u>	<u>Approved</u>	<u>Projected</u>	<u># Chg.</u>	<u>% Chg.</u>
Metrorail	204,067	206,396	209,900	201,500	(8,400)	-4%
Metrobus	134,408	132,902	140,100	135,600	(4,500)	-3%
MetroAccess	2,126	2,238	2,335	2,440	105	4%
<b>Total</b>	<b>340,601</b>	<b>341,536</b>	<b>352,335</b>	<b>339,540</b>	<b>(12,795)</b>	<b>-4%</b>

<sup>1</sup> Metrorail ridership is based on linked trips; Metrobus ridership is based on unlinked trips; MetroAccess ridership is based on total passengers. Unlinked trips are total boardings, while linked trips are total number of complete trips from origin to destination, including transfers.

FY2017 projected revenue is modified from the current FY2016 budget to account for changes in external factors that impact Metro's ridership, including projected growth in employment in the District of Columbia and the region, population growth rates, and other economic factors. Metro's most recent system-wide fare increases were implemented in FY2015, and Metro would normally consider broad fare changes for FY2017 in keeping with the Board's policy to assess fare changes on a biannual basis. However, given recent ridership declines and challenges with customer satisfaction, this proposed budget includes no broad-based fare increases, and it also proposes the introduction of new fare products (aimed at retaining customers and encouraging additional trip-taking) that actually constitute fare reductions.

Metro uses a set of forecasting models to develop its ridership projections for Metrorail, Metrobus, and MetroAccess. The models use economic data from a variety of sources, including projections from Moody's Analytics for key inputs and an assessment of current and future economic conditions. Two of the strongest indicators for forecasting ridership trends have been population and employment expectations for the District of Columbia. The forecasts also utilize other variables that capture secondary impacts, including the number of hotel rooms sold in the regional core and the number of construction jobs in the District of Columbia. However, the changing trip-making behavior that has been evident in the post-recession environment has proven challenging to forecast, particularly with respect to telecommuting and the emergence of alternative travel options, as discussed in the next section.

### *Metrorail*

Projected Metrorail passenger fare revenue for FY2017 is \$614.6 million, a decrease of \$21.3 million or 3.4 percent below the approved FY2016 budget level (including fares related to the DC Student Subsidy program). Through the first five months of FY2016, ridership on Metrorail has

been consistently lower than the same period of FY2015, and this proposed budget reflects a projected continuation of that trend. In addition to external challenges that are outlined below, a significant additional challenge is reduced service reliability since the opening of the Silver Line and a concurrent drop in customer satisfaction.

- The reduction of the federal transit benefit to below parity with the federal parking benefit (currently at \$130 per month for transit compared to \$250 per month for parking as of November 2015) raises the out-of-pocket cost of commuting by transit, particularly for suburban commuters making longer-distance trips and those who park-and-ride to access the Metrorail system. Rather than supplementing the lower subsidy with their own funds, some riders are choosing not to ride Metrorail and are either traveling by another mode (e.g., driving and parking) or are no longer traveling as frequently.
- Federal employment in the region (both direct employees and contractors) continues to stagnate and decline, as demonstrated by detailed employment data provided by Moody's Analytics. This decline is due to a number of causes, including sequestration, an increasing number of retirements (as the Baby Boom generation reaches retirement age), and the drawdown of military engagements abroad. Federal employees have always been a key market segment for Metrorail, and the economic impact of this lack of growth is being seen in Metro's ridership.
- More recently, beginning in the fall of 2014, gas prices dropped to levels not seen since 2009-10 just after the financial crisis and recession, and as of December 2015, the national average price for regular gas is just slightly above \$2.00 per gallon. All else equal, this price decline makes driving a more attractive option.
- There are a number of other market-based factors that are also having a negative impact on rail ridership. These include telecommuting and alternative work schedules, which are heavily promoted by federal departments and agencies (ridership on Mondays and Fridays in particular shows the impact of these policies), and mode shifts to other non-single occupancy vehicle (SOV), non-Metrorail modes including car-sharing and biking, particularly due to the success of Capital Bikeshare for short trips in the urban core.
- Recent changes to the District of Columbia Student Subsidy program are having a positive impact on Metrorail ridership and on Metro's overall revenues. In the summer of 2015, the Council of the District of Columbia approved a new "Kids Ride Free on Rail" program to complement the existing "Kids Ride Free on Bus" program. Working cooperatively with District Department of Transportation (DDOT) and District of Columbia Public Schools (DCPS), WMATA rolled out this new program in time for the start of the 2015-2016 school year. Students can now make unlimited trips on Metrorail (within the District of Columbia), and the District of Columbia compensates WMATA through both an upfront monthly charge and a per-trip usage charge. Usage of the new rail pass product has increased steadily since August, while at the same time student usage of the free bus product has remained strong.

As noted above, however, the recent decline compared to FY2015 appears to be due in part to customer concerns over service quality and reliability. Metrorail experienced a series of safety-related incidents in 2015, including the Yellow Line tunnel incident outside L'Enfant Plaza in January, the derailment of a train prior to the system opening near Smithsonian in August, and a substation fire at Stadium-Armory in September. Metrorail is also struggling to provide reliable service to customers. Rail On-Time Performance, which measures how evenly-spaced the trains

are, has been consistently below target, particularly since the opening of the Silver Line. Riders are experiencing more unpredictable travel times, and must budget more time to reach their destination.

### ***Metrobus***

The proposed Metrobus passenger revenue budget for FY2017 is \$158.3 million, a decrease of \$7.2 million or 4.4 percent over the approved FY2016 budget. Metrobus ridership and revenue performance in the years following the 2009-2010 recession was generally strong, as passengers responded positively to the combination of low fares and high quality service (e.g., new bus fleet, improved reliability and on-time performance). Growth in demand for Metrobus has been particularly strong in certain corridors such as 14<sup>th</sup> Street, 16<sup>th</sup> Street, and Georgia Avenue in the District of Columbia, where adding capacity and improving travel time have been major initiatives. In addition, the Kids Ride Free program for District of Columbia students continues to be successful, carrying approximately 23,000 student rides on an average weekday.

However, bus ridership did dip in the fourth quarter FY2015, and this has continued into FY2016. This decline has a number of potential causes:

- There is some evidence that rail's challenges are spilling over to bus. Morning bus-to-rail transfers were down ten percent in FY2016-Q1, which is twice the loss of overall bus ridership, and the heaviest losses were concentrated at Wiehle, New Carrollton, Vienna, and Pentagon, indicating that bus may be losing trips from commuters reacting to the challenges on rail.
- Average bus speeds have steadily declined in recent years and continue to drop, which impacts the quality of service. Many factors are contributing to this trend, particularly increased traffic congestion, but there are opportunities to improve the customer experience, including investments in Traffic Signal Priority (TSP) and changes to speed passenger loading.
- Finally, ridership is also trending downward at other bus operators across the region, indicating some correlation to broader socioeconomic conditions rather than being specific to Metro. WMATA continues to work with our partner jurisdictions to understand and address the causes of these declines.

As a result of these factors, the FY2017 projection includes a three percent reduction in projected bus ridership and revenue from approved FY2016 levels.

### ***MetroAccess***

As the population continues to age, and disability rates continue to rise, the utilization of MetroAccess is also expected to grow. MetroAccess forecasted passenger revenue for FY2017 is \$10.0 million, an increase of \$1.5 million over the FY2016 proposed budget (though only an increase of \$0.9 million over FY2015 actual revenue). MetroAccess registrations and ridership are projected to increase in FY2017, continuing the current trend dating back to FY2014.

Approximately 60 percent of MetroAccess trips are provided in Montgomery and Prince George's Counties in Maryland, with another 14 percent of trips in the combined Virginia jurisdictions, and the remainder in the District of Columbia. Trip volumes are relatively low in Virginia due to the

presence of alternative service providers, and growth has been slowed recently in the District of Columbia as a result of the TransportDC program, which shifts certain eligible MetroAccess trips onto taxicabs. The TransportDC program was started in October 2014, and over the past year has grown to serve more than 10,000 trips per month.

### ***Parking***

Total parking revenue for FY2017 is projected at \$46.1 million, a decline of \$2.9 million compared to the approved FY2016 level based on experience to date in FY2016. Overall parking utilization through the first quarter is down to 74 percent from 78 percent in the same period of FY2015, in conjunction with the declines seen in Metrorail ridership. Parking utilization continues to vary substantially by location across the region, with higher utilization in both Montgomery County and the District of Columbia (78 percent), moderate utilization in Northern Virginia (75.0 percent), and the lowest utilization in Prince George's County (69 percent). As noted previously, parking usage in Northern Virginia along the Orange Line shifted substantially as a result of the opening of the Silver Line and the addition of 2,300 spaces at the new parking facility at the Wiehle-Reston East station, which is not owned by WMATA. Notably, utilization has dropped at West Falls Church from an average of 97 percent prior to the opening of the Silver Line to 56.0 percent in the first quarter of FY2016.

### ***New Fare Products***

As part of WMATA's effort to better serve customers and increase off-peak ridership, the budget proposes a number of discounts, credits, and other changes to its fare products in order to encourage ridership.

- *Credit for entry/exit at the same station:* WMATA proposes to institute a 15-minute "grace period" whereby any customer who enters and exits at the same Metrorail station within that period will have the fare credited back to his or her SmarTrip® card. Customers frequently complain about being charged a fare when they leave a station without receiving service during a disruption.
- *Combo rail/bus passes at no additional charge:* While WMATA's 7-day unlimited bus pass is a popular product, the 1-day, 7-day, and 28-day rail passes are relatively under-utilized, in large part because the price is too high for all but the longest-distance and/or very frequent travelers. WMATA is proposing to keep the rail pass pricing the same, but add an unlimited bus pass of the same duration to each product for no additional charge. The 7-day bus pass will still be available for individual purchase. The goal of this change is to stimulate intermodal rail/bus trips as well as off-peak travel, although the incremental revenue and ridership associated with the combo pass is expected to be modest, at least in the near term.
- *University Pass:* WMATA is working in conjunction with universities in the Washington region on a new University Pass aimed at students. The University Pass would offer unlimited riding privileges on both Metrobus and Metrorail at substantially discounted rates to full-time students at accredited colleges. University students represent an untapped partnership, with 20 colleges and approximately 225,000 students in the region who can drive additional ridership and revenue for the Authority while reducing the need for parking facilities on the university campuses. The strongest initial interest has come from American University, with almost 12,000 students at multiple campuses, and Metro staff and AU staff are working cooperatively on implementation issues ahead of a planned introduction.

The University Pass program requires 100 percent student participation, and each student will receive a semester or annual pass that offers unlimited rides on Metro (not MetroAccess). The incremental ridership and revenue from the University Pass will vary significantly depending on the particular campuses that choose to participate, given their location and the transportation options available to students.

- *'Name your own price' pass*: Pending Board approval, WMATA will be implementing a concept test for a new 'name your own price' monthly pass in the spring of 2016. The new monthly pass will allow customers unlimited access to the Metrorail system for one low price, paid as a monthly subscription. The pass will allow customers to use the WMATA transit network in ways built around today's lifestyles and travel patterns:
  - Subscribers will be able to "name their own price," based on their normal commute trip, making this pass customizable for each individual's travel needs and budget – any trip with a fare equal to or less than the normal commute trip is covered, and any occasional longer trip just requires payment of the difference from stored value on the SmarTrip® card.
  - The pass will allow customers to make multiple stops along their journey without having to pay for multiple trips.
  - Customers can choose to extend their transit access by making their pass qualify for unlimited bus trips in addition to Metrorail trips
  - The pass will begin and end on the first of every calendar month, and conveniently auto-renew, allowing subscribers to no longer worry about having enough value on their cards and instead "set it and forget it"
  - Customers familiar with subscription services such as streaming entertainment packages or who purchase a monthly cell phone plan will find the approach of the new pass familiar and convenient.

No net additional revenue from these three products described above is currently included in the FY2017 budget.

## **Non-Passenger Revenue**

### ***Advertising***

Total advertising revenue in FY2017 is projected at \$23.5 million, an increase of \$3.0 million over the FY2016 budget. A new multi-year advertising contract that commenced in FY2016 is already bringing in additional revenues, and the Board's recent actions approving an expansion of the advertising inventory (including more digital advertising) and approving the advertising of alcohol are expected to provide additional revenue growth in FY2017 and beyond. These policy actions, combined with organic growth, are expected to more than offset the loss of revenue associated with the Board's enactment of a permanent ban on the sale of issue-oriented advertising, which typically represents about 5 percent of annual advertising revenue.

### ***Joint Development***

The FY2017 Joint Development revenues allocated to the operating budget are \$7.0 million. These revenues tend to grow moderately over time as leases are renegotiated. However, there is limited opportunity for major growth in this revenue category since current Board policy dictates that

revenues from new joint development leases or joint development property sales go into the Capital Improvement Program (CIP).

### ***Fiber Optics***

The Metro Fiber Optic Program, initiated in September 1986, has allowed for the installation, operation, and maintenance of a fiber optic-based telecommunication network that utilizes excess capacity within the Metro right-of-way. Metro also receives a number of fibers for its own use as part of the compensation package. For FY2017, fiber optic revenue is projected at \$16.5 million, unchanged from the FY2016 approved budget.

### ***Other Revenue***

Other revenue in the proposed FY2017 budget includes vending machines, ATM revenue, cellular telephone agreements, employee parking, bike locker fees, car sharing revenue, and antenna revenue. Previously, insurance subrogation collections were included in this account, but these are now counted as a credit against expenses rather than revenue. These combined miscellaneous revenue sources are expected to contribute \$14.0 million to FY2017 non-passenger revenues, a decrease of \$20.0 million from the FY2016 budget. The major change in this category is that the one-time revenues of \$27.0 million from the now-closed Transit Infrastructure Investment Fund (TIIF), which were used to support Metrorail expenses in FY2016, are no longer available. However, additional revenue is projected from land sale proceeds and from reimbursements from the State of Maryland for the new Takoma-Langley Transit Center.



**OPERATING BUDGET  
REVENUES**

*(figures in thousands)*

	<b>Actual 2014</b>	<b>Actual 2015</b>	<b>Approved 2016</b>	<b>Proposed 2017</b>	<b>Change</b>
<b>Metrobus</b>					
Passenger	\$141,421	\$145,691	\$156,835	\$151,620	(\$5,216)
Other Passenger	8,404	9,480	8,725	6,725	(2,000)
Parking	0	410	0	0	0
Advertising	13,297	14,956	13,695	15,699	2,004
Joint Development	0	0	0	0	0
Fiber Optics	0	0	0	0	0
Other	1,900	5,586	2,080	3,080	1,000
<b>Subtotal</b>	<b>\$165,022</b>	<b>\$176,123</b>	<b>\$181,335</b>	<b>\$177,124</b>	<b>(\$4,211)</b>
<b>Metrorail</b>					
Passenger	\$593,324	\$626,965	\$632,133	\$606,800	(\$25,333)
Other Passenger	3,410	2,090	3,818	7,818	4,000
Parking	46,614	46,103	49,000	46,103	(2,897)
Advertising	6,549	7,466	6,805	7,801	996
Joint Development	7,360	6,161	8,000	7,000	(1,000)
Fiber Optics	15,467	15,441	16,500	16,500	0
Other	8,152	17,761	31,909	10,909	(21,000)
<b>Subtotal</b>	<b>\$680,876</b>	<b>\$721,986</b>	<b>\$748,164</b>	<b>\$702,930</b>	<b>(\$45,234)</b>
<b>MetroAccess</b>					
Passenger	\$7,542	\$9,045	\$8,500	\$9,972	\$1,472
Other Passenger	0	0	0	0	0
Parking	0	0	0	0	0
Advertising	0	0	0	0	0
Joint Development	0	0	0	0	0
Fiber Optics	0	0	0	0	0
Other	(1)	0	0	0	0
<b>Subtotal</b>	<b>\$7,542</b>	<b>\$9,045</b>	<b>\$8,500</b>	<b>\$9,972</b>	<b>\$1,472</b>
<b>Total</b>					
Passenger	\$742,288	\$781,701	\$797,468	\$768,391	(\$29,077)
Other Passenger	11,814	11,570	12,543	14,543	2,000
Parking	46,614	46,513	49,000	46,103	(2,897)
Advertising	19,846	22,422	20,500	23,500	3,000
Joint Development	7,360	6,161	8,000	7,000	(1,000)
Fiber Optics	15,467	15,441	16,500	16,500	0
Other	10,052	23,347	33,989	13,989	(20,000)
<b>Grand Total</b>	<b>\$853,439</b>	<b>\$907,154</b>	<b>\$938,000</b>	<b>\$890,026</b>	<b>(\$47,974)</b>

**FY2017 Proposed Operating Subsidy**

The FY2017 proposed jurisdictional operating funding is \$866.5 million – the same level that was approved for the FY2016 budget (including debt service). This includes:

- FY2017 net operating subsidy for Metrobus, Metrorail, and MetroAccess of \$845 million, which is flat from FY2016, primarily as a result of the proposed change to fund additional eligible preventive maintenance (PM) expenses with FTA grants in the capital budget.
- Debt service payments of \$21.2 million, approximately the same as FY2016.

<b>Jurisdictional Operating Subsidy</b>						
	<b>FY2014</b>	<b>FY2015</b>	<b>FY2016</b>	<b>FY2017</b>	<b>Variance to FY2016</b>	
<i>(millions)</i>	<b>Approved</b>	<b>Approved</b>	<b>Approved</b>	<b>Proposed</b>	<b>\$ Chg</b>	<b>% Chg</b>
<b>Net Subsidy<sup>1</sup></b>	\$732.5	\$778.1	\$845.3	\$845.3	\$0.0	0.0%
<b>Total Subsidy<sup>2</sup></b>	\$734.9	\$779.3	\$866.5	\$866.5	\$0.0	0.0%

<sup>1</sup> Excluding debt service and application of prior year surpluses

<sup>2</sup> Including debt service and application of prior year surpluses

**FISCAL YEAR 2017 PROPOSED BUDGET  
SUMMARY OF STATE/LOCAL OPERATING REQUIREMENTS**

	District of Columbia	Montgomery County	Prince George's County	City of Alexandria	Arlington County	City of Fairfax	Fairfax County	City of Falls Church
<b>Total</b>								
<b>Metrobus Operating Subsidy</b>								
Regional Bus Subsidy	\$170,441,589	\$57,679,594	\$68,987,558	\$18,863,377	\$29,795,233	\$633,991	\$54,150,738	\$1,384,548
Non-Regional Bus Subsidy	\$32,511,290	\$9,642,247	\$23,789,452	\$2,036,219	\$2,081,948	\$0	\$7,657,564	\$0
Subtotal	\$202,952,879	\$67,321,841	\$92,777,010	\$20,899,596	\$31,877,181	\$633,991	\$61,808,301	\$1,384,548
<i>Percent of Total</i>	42.3%	14.0%	19.3%	4.4%	6.6%	0.1%	12.9%	0.3%
<b>Metrorail Operating Subsidy</b>								
Base Allocation	\$82,636,574	\$44,869,985	\$39,645,003	\$11,457,883	\$23,733,273	\$784,434	\$38,971,627	\$732,844
Max Fare Subsidy	\$688,421	\$3,202,953	\$1,461,533	\$293,205	\$186,710	\$60,408	\$1,265,260	\$38,368
Subtotal	\$83,324,995	\$48,071,938	\$41,106,536	\$11,751,089	\$23,919,983	\$844,842	\$40,236,887	\$771,213
<i>Percent of Total</i>	33.3%	19.2%	16.4%	4.7%	9.6%	0.3%	16.1%	0.3%
<b>MetroAccess Subsidy</b>								
Subtotal	\$27,196,153	\$22,859,858	\$49,391,236	\$900,124	\$893,994	\$321,024	\$13,990,647	\$84,929
<i>Percent of Total</i>	23.5%	19.8%	42.7%	0.8%	0.8%	0.3%	12.1%	0.1%
<b>Net Operating Subsidy</b>								
Subtotal	\$313,474,027	\$138,253,637	\$183,274,782	\$33,550,809	\$56,691,158	\$1,799,857	\$116,035,835	\$2,240,690
<i>Percent of Total</i>	37.1%	16.4%	21.7%	4.0%	6.7%	0.2%	13.7%	0.3%
Metro Matters Debt Service	\$10,673,432	\$4,944,933	\$5,506,136	\$0	\$0	\$0	\$0	\$52,943
<b>Total Debt Service</b>	\$10,673,432	\$4,944,933	\$5,506,136	\$0	\$0	\$0	\$0	\$52,943
<b>Jurisdictional Operating Funding</b>								
Subtotal	\$324,147,459	\$143,198,571	\$188,780,917	\$33,550,809	\$56,691,158	\$1,799,857	\$116,035,835	\$2,293,633

**FY2017 Proposed Capital Funding**

Metro's proposed FY2017-2021 Capital Improvement Program (CIP) financial plan relies on a forecasted investment of \$6.0 billion from the federal government, state and local government partners, planned long-term financing, and other sources. Within the \$6.0 billion six-year plan, \$2.65 billion comes from federal funding; state and local contributions (including residual Metro 2025 funding) total \$2.17 billion; planned long-term financing during the period totals \$1.18 billion; and other sources total \$12 million. A more detailed discussion of the capital funding sources can be found in Chapter 4 of the FY2017 Proposed Capital Budget.

**FY2017-2022 Proposed Capital Improvement Program (CIP)**

	FY2017 - FY2022 Plan							
	FY2016 Forecast	FY2017 Proposed	FY2018 Plan	FY2019 Plan	FY2020 Plan	FY2021 Plan	FY2022 Plan	FY2017-2022 Total
<b>Federal</b>								
Federal Formula Programs	\$439.9	\$285.6	\$285.6	\$285.6	\$285.6	\$285.6	\$285.6	\$1,713.6
Federal PRIIA	\$200.2	\$170.0	\$148.5	\$148.5	\$148.5	\$148.5	\$148.5	\$912.5
Resiliency Grant	\$1.9	\$12.2	\$7.4					\$19.6
Other Federal Grants	\$34.1	\$1.7	\$0.6	\$0.6	\$0.6	\$0.6	\$0.6	\$4.9
Subtotal Federal	\$676.1	\$469.5	\$442.1	\$434.7	\$434.7	\$434.7	\$434.7	\$2,650.6
<b>State and Local</b>								
Match to Federal Formula	\$110.0	\$71.4	\$71.4	\$71.4	\$71.4	\$71.4	\$71.4	\$428.4
System Performance	\$61.0	\$118.1	\$125.9	\$137.7	\$135.4	\$143.5	\$150.6	\$811.2
State and Local PRIIA	\$200.2	\$148.5	\$148.5	\$148.5	\$148.5	\$148.5	\$148.5	\$891.0
Rail Power System Upgrades	\$17.7							
Other State and Local	\$8.5	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$1.0
Subtotal State/Local before Carryover	\$397.3	\$338.1	\$346.0	\$357.8	\$355.5	\$363.6	\$370.7	\$2,131.6
State and Local PRIIA - Carryover		\$21.5						\$21.5
Subtotal State and Local	\$397.3	\$359.6	\$346.0	\$357.8	\$355.5	\$363.6	\$370.7	\$2,153.0
<b>Other Sources</b>								
MetroMatters								
Insurance Proceeds	\$2.3	\$2.5	\$0.6	\$0.6	\$0.6	\$0.6	\$0.6	\$5.6
Land Sale Proceeds	\$16.0							
Joint Development Proceeds	\$3.5							
Miscellaneous	\$0.6	\$4.1	\$2.5					\$6.5
Subtotal Other Sources	\$22.4	\$6.6	\$3.1	\$0.6	\$0.6	\$0.6	\$0.6	\$12.1
<b>Financing</b>								
Planned Long-Term Financing		\$287.7	\$249.5	\$221.7	\$201.1	\$117.7	\$100.5	\$1,178.3
Subtotal Financing		\$287.7	\$249.5	\$221.7	\$201.1	\$117.7	\$100.5	\$1,178.3
<b>Metro 2025 Investment</b>								
Metro 2025 Investment	\$46.0	\$5.0	\$1.0					\$6.0
Subtotal Metro 2025	\$46.0	\$5.0	\$1.0					\$6.0
<b>Total</b>	<b>\$1,141.7</b>	<b>\$1,128.3</b>	<b>\$1,041.7</b>	<b>\$1,014.8</b>	<b>\$992.0</b>	<b>\$916.7</b>	<b>\$906.5</b>	<b>\$6,000.0</b>

# Chapter 3 - FY2017 Proposed Operating Budget



*7M Mark Center Bus at Pentagon*

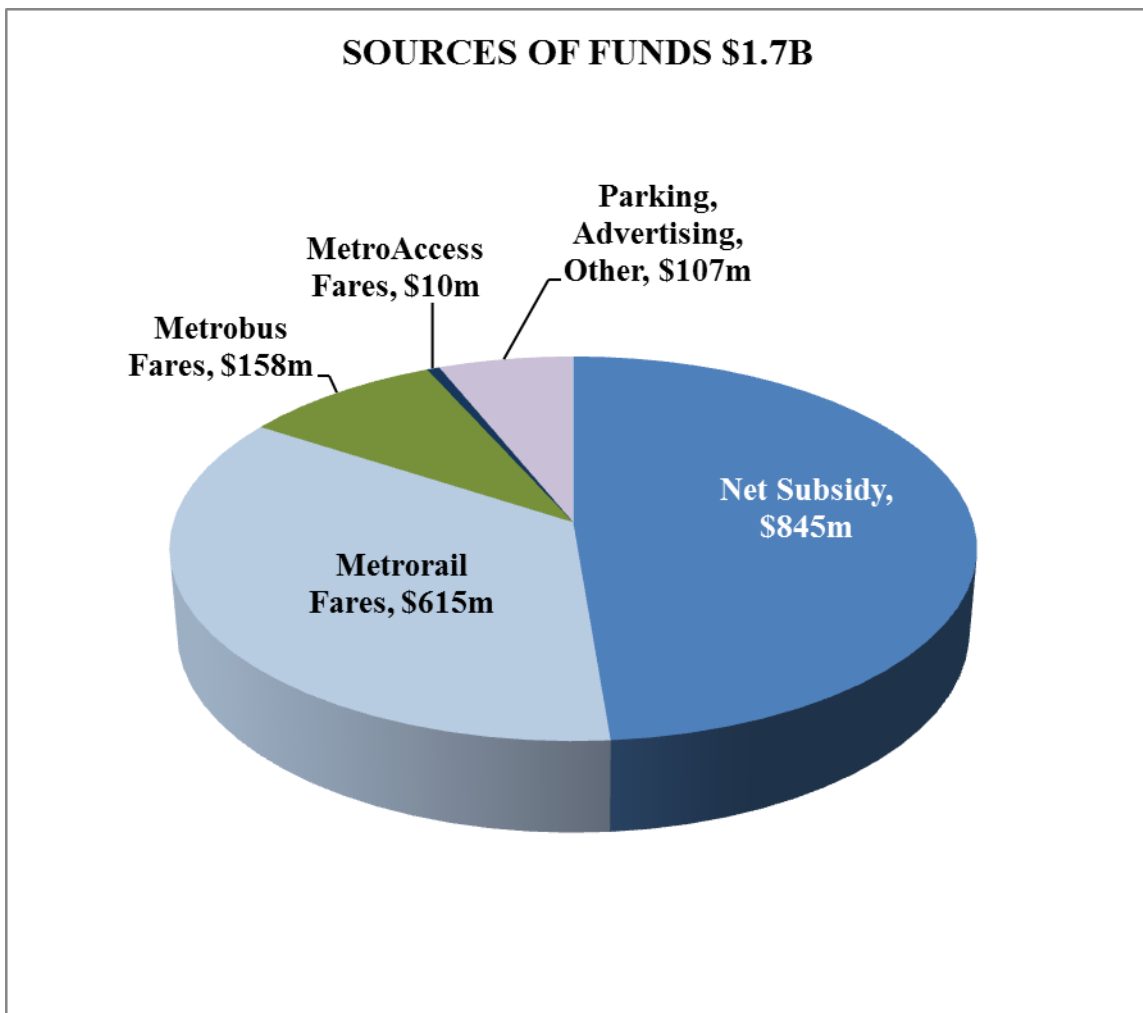


## FY2017 Proposed Operating Budget

The Operating Budget funds costs associated with Metrobus, Metrorail and MetroAccess. In total the proposed operating budget is \$1.735 billion, a 4.3 percent decrease from the FY2016 budget.

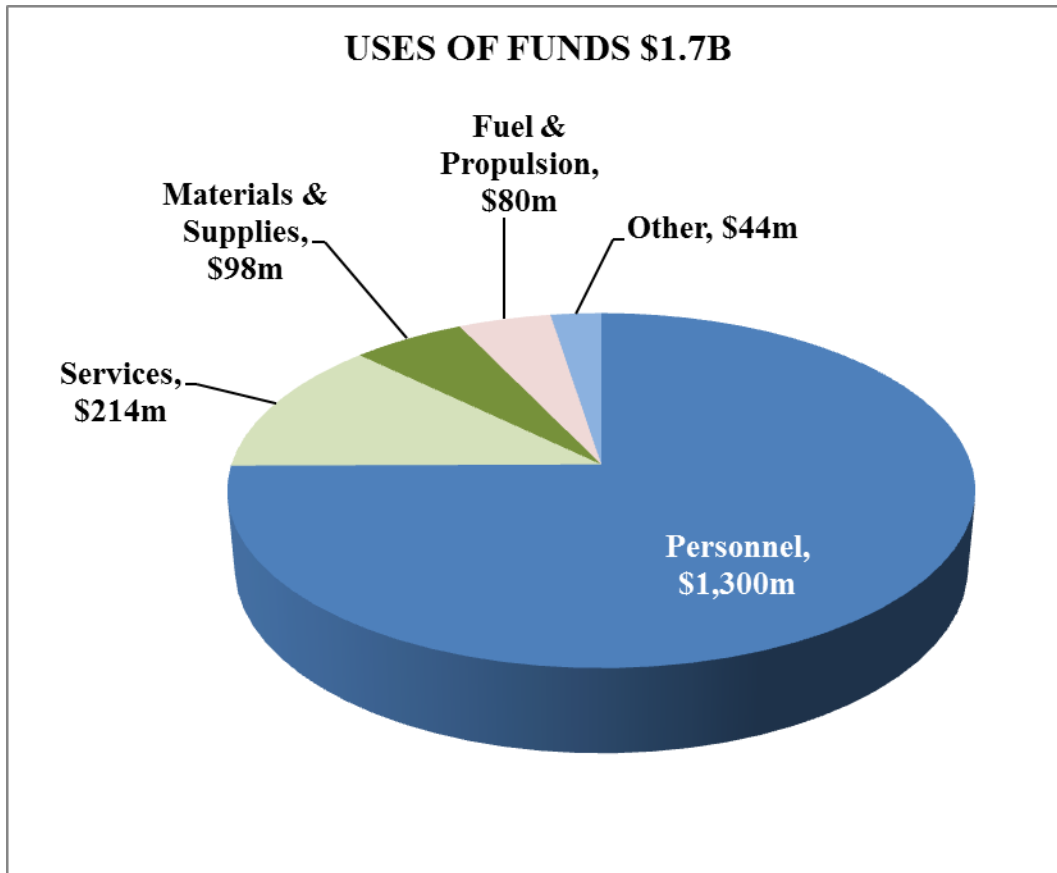
### *Sources of Funds*

The largest source of funding is from the net local subsidy of \$845.3 million or 48.7 percent of total expenses. The second largest source of funding comes from passenger fare revenue at \$782.9 million or 45.1 percent, from Metrobus, Metrorail and MetroAccess. The remaining \$107.1 million comes from parking, advertising, fiber optic leases and other revenues.



*Uses of Funds*

The largest operating budget expenditure category is Personnel at \$1.3 billion or 74.9 percent, followed by Services with expenses totaling \$213.7 million or 12.3 percent.

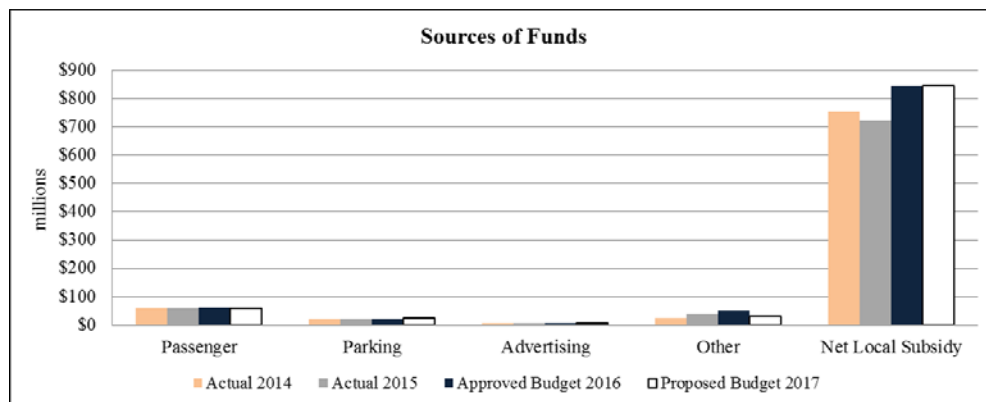


*Note: Does not include Operating Reimbursable projects or debt service.*

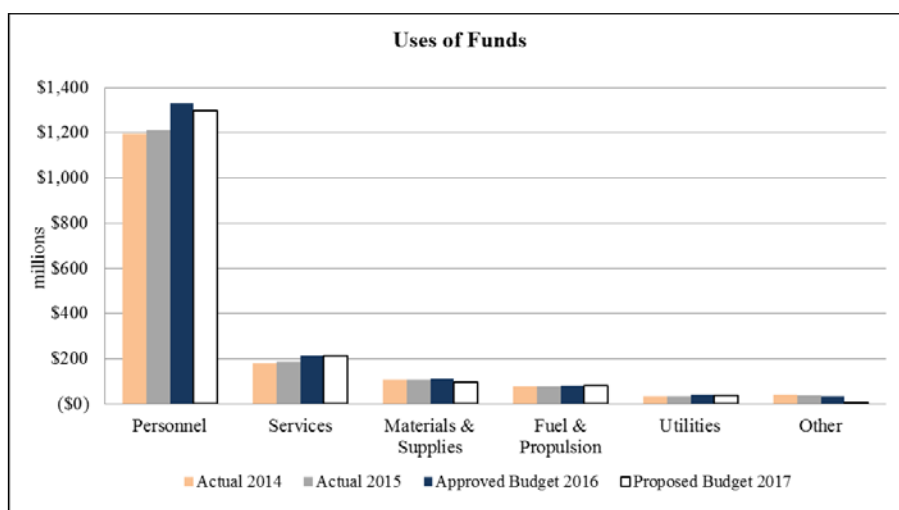


<b>WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY REVENUE, EXPENSE &amp; FUNDING SOURCES SUBSIDIZED BY ACCOUNT</b>					
(Dollars in Thousands)	Actual 2014	Actual 2015	Approved Budget 2016	Proposed Budget 2017	Variance
Passenger	742,288	781,701	797,468	768,391	(29,077)
Other Passenger	11,814	11,570	12,543	14,543	2,000
Parking	46,614	46,513	49,000	46,103	(2,897)
Advertising	19,846	22,422	20,500	23,500	3,000
Joint Development	7,360	6,161	8,000	7,000	(1,000)
Other	10,071	23,183	33,989	13,989	(20,000)
Employee Parking	137	140	0	0	0
Interest	(156)	24	0	0	0
Fiber Optics	15,467	15,441	16,500	16,500	0
<b>Total Revenues</b>	<b>\$853,439</b>	<b>\$907,154</b>	<b>\$938,000</b>	<b>\$890,026</b>	<b>(\$47,974)</b>
<b>EXPENSES</b>					
Personnel	1,195,686	1,212,346	1,330,379	1,299,657	(30,722)
Services	179,235	187,352	213,250	213,660	410
Materials & Supplies	108,815	108,732	111,041	97,989	(13,053)
Fuel & Propulsion Power	78,955	79,801	81,574	80,297	(1,277)
Utilities	36,102	36,023	42,400	39,854	(2,547)
Casualty & Liability	34,046	28,332	24,305	34,895	10,591
Leases & Rentals	5,769	6,183	6,796	6,725	(71)
Miscellaneous	961	2,447	4,282	5,270	988
Capital Allocation	0	0	0	(43,000)	(43,000)
<b>Total Expenses</b>	<b>\$1,639,570</b>	<b>\$1,661,216</b>	<b>\$1,814,028</b>	<b>\$1,735,347</b>	<b>(\$78,681)</b>
<b>GROSS SUBSIDY</b>	<b>\$786,131</b>	<b>\$754,062</b>	<b>\$876,028</b>	<b>\$845,321</b>	<b>(\$30,707)</b>
Preventive Maintenance	(\$30,700)	(\$30,700)	(\$30,700)	\$0	30,700
<b>Net Local Subsidy</b>	<b>\$755,431</b>	<b>\$723,362</b>	<b>\$845,328</b>	<b>\$845,321</b>	<b>(\$7)</b>
<b>Cost Recovery Ratio</b>	<b>52.1%</b>	<b>54.6%</b>	<b>51.7%</b>	<b>51.3%</b>	

Over the period from FY2014 to FY2017, passenger fares have remained the primary source of revenue, growing by \$28.8 million or 3.8 percent. Net local subsidy decreased by \$32 million or 4.2 percent from FY2014 to FY2015 and remains flat to budget at \$845.3 million from FY2016 to FY2017.



FY2017 operating personnel costs are \$1.3 billion, a decrease of \$30.7 million or 2.3 percent over FY2016. This decrease is primarily driven by the proposed transfer of certain preventive maintenance and heavy overhaul activities from the Operating budget to the Capital Improvement Program (CIP). This decrease is offset by FTA required safety corrective actions, fiscal impacts associated with current collective bargaining agreements and the impact of Metro’s updated method for allocating indirect costs. Fringe Benefits decreased by \$19.2 million or 4.5 percent mostly due to changes in pension contribution agreements and the elimination of the OPEB budget. FY2017 service expenses for the operating budget are \$213.7 million, an increase of \$0.4 million, or 0.2 percent over FY2016. This increase is due primarily to projected growth in the Paratransit service contract costs as a result of increased ridership.



<b>OPERATING BUDGET REVENUES AND EXPENSES</b>				
	<b>PROPOSED</b>	<b>BUS</b>	<b>RAIL</b>	<b>ACCESS</b>
	<b>Budget</b>	<b>Budget</b>	<b>Budget</b>	<b>Budget</b>
<i>(Dollars in Thousands)</i>	<b>FY2017</b>	<b>FY2017</b>	<b>FY2017</b>	<b>FY2017</b>
<b>REVENUES</b>				
Passenger	\$768,391	\$151,620	\$606,800	\$9,972
Other Passenger	\$14,543	\$6,725	\$7,818	\$0
Parking	\$46,103	\$0	\$46,103	\$0
Advertising	\$23,500	\$15,699	\$7,801	\$0
Joint Development	\$7,000	\$0	\$7,000	\$0
Fiber Optics	\$16,500	\$0	\$16,500	\$0
Other	\$13,989	\$3,080	\$10,909	\$0
Interest	\$0	\$0	\$0	\$0
<b>Total Revenues</b>	<b>\$890,026</b>	<b>\$177,124</b>	<b>\$702,930</b>	<b>\$9,972</b>
<b>EXPENSES</b>				
Personnel	\$1,299,657	\$526,061	\$761,463	\$12,133
Services	\$213,660	\$44,620	\$65,039	\$104,001
Materials & Supplies	\$97,989	\$38,496	\$51,590	\$7,903
Fuel & Propulsion Power	\$80,297	\$31,493	\$48,804	\$0
Utilities	\$39,854	\$15,295	\$23,795	\$763
Casualty & Liability	\$34,895	\$13,547	\$20,686	\$663
Leases & Rentals	\$6,725	\$2,045	\$3,838	\$842
Miscellaneous	\$5,270	\$1,907	\$3,242	\$120
Capital Allocation	(\$43,000)	(\$16,684)	(\$25,499)	(\$817)
<b>Total Expenses</b>	<b>\$1,735,347</b>	<b>\$656,780</b>	<b>\$952,958</b>	<b>\$125,610</b>
<b>Net Local Subsidy</b>	<b>\$845,321</b>	<b>\$479,655</b>	<b>\$250,027</b>	<b>\$115,638</b>
<b>Cost Recovery Ratio</b>	<b>51.3%</b>	<b>27.0%</b>	<b>73.8%</b>	<b>7.9%</b>

FY2017 PROPOSED OPERATING EXPENSE BUDGET AUTHORITY WIDE						
	Actual	Actual	Approved	Proposed		
<i>(Dollars in Thousands)</i>	2014	2015	Budget	Budget	Variance	% Chg
			2016	2017		
<b>Salaries</b>	<b>\$254,170</b>	<b>\$261,919</b>	<b>\$292,731</b>	<b>\$338,996</b>	<b>\$46,264</b>	<b>15.8%</b>
Full-Time Salaries	\$240,906	\$250,371	\$286,020	\$349,883	\$63,863	
Salary Lapse	\$0	\$0	(\$7,243)	(\$24,738)	(\$17,495)	
Overtime Salaries	\$13,264	\$11,548	\$13,955	\$13,851	(\$104)	
<b>Wages</b>	<b>\$553,140</b>	<b>\$543,458</b>	<b>\$607,096</b>	<b>\$547,197</b>	<b>(\$59,899)</b>	<b>-9.9%</b>
Operator/StaMgr Wages	\$224,268	\$243,400	\$256,605	\$251,440	(\$5,165)	
Operator/StaMgr Overtime	\$45,626	\$41,175	\$43,503	\$41,439	(\$2,064)	
Full Time Wages	\$264,057	\$242,511	\$296,422	\$243,235	(\$53,187)	
Wage Lapse	\$0	\$0	(\$9,773)	(\$10,589)	(\$816)	
Overtime Wages	\$19,190	\$16,372	\$20,339	\$21,672	\$1,333	
<b>TOTAL SALARIES AND WAGES</b>	<b>\$807,310</b>	<b>\$805,378</b>	<b>\$899,827</b>	<b>\$886,193</b>	<b>(\$13,634)</b>	<b>-1.5%</b>
<b>Fringes</b>	<b>\$388,376</b>	<b>\$406,969</b>	<b>\$430,552</b>	<b>\$413,464</b>	<b>(\$17,087)</b>	<b>-4.0%</b>
<b>TOTAL PERSONNEL COST</b>	<b>\$1,195,686</b>	<b>\$1,212,346</b>	<b>\$1,330,379</b>	<b>\$1,299,657</b>	<b>(\$30,722)</b>	<b>-2.3%</b>
<b>Services</b>	<b>\$179,235</b>	<b>\$187,352</b>	<b>\$213,250</b>	<b>\$213,660</b>	<b>\$410</b>	<b>0.2%</b>
Management Fee	\$129	\$143	\$166	\$428	\$262	
Professional & Technical	\$17,259	\$21,588	\$28,861	\$42,262	\$13,400	
Temporary Help	\$2,112	\$3,286	\$2,706	\$3,303	\$597	
Contract Maintenance	\$43,377	\$39,583	\$48,774	\$45,755	(\$3,019)	
Custodial Services	\$25	\$46	\$83	\$85	\$2	
Paratransit	\$85,276	\$92,826	\$92,957	\$98,704	\$5,747	
Other	\$31,056	\$29,880	\$39,703	\$23,124	(\$16,579)	
<b>Materials &amp; Supplies</b>	<b>\$108,815</b>	<b>\$108,732</b>	<b>\$111,041</b>	<b>\$97,989</b>	<b>(\$13,053)</b>	<b>-11.8%</b>
Fuel and Lubricants	\$14,913	\$12,084	\$22,035	\$13,802	(\$8,233)	
Tires	\$5,725	\$5,821	\$6,915	\$5,886	(\$1,030)	
Other	\$88,176	\$90,827	\$82,092	\$78,302	(\$3,790)	
<b>Fuel &amp; Propulsion</b>	<b>\$78,955</b>	<b>\$79,801</b>	<b>\$81,574</b>	<b>\$80,297</b>	<b>(\$1,277)</b>	<b>-1.6%</b>
Diesel Fuel	\$27,499	\$27,049	\$26,784	\$26,674	(\$110)	
Propulsion Power	\$48,218	\$51,305	\$55,383	\$50,850	(\$4,532)	
Clean Natural Gas	\$3,238	\$1,447	(\$593)	\$2,773	\$3,365	
<b>Utilities</b>	<b>\$36,102</b>	<b>\$36,023</b>	<b>\$42,400</b>	<b>\$39,854</b>	<b>(\$2,547)</b>	<b>-6.0%</b>
Electricity and Gas	\$29,461	\$29,376	\$33,401	\$31,666	(\$1,735)	
Utilities - Other	\$6,642	\$6,647	\$8,999	\$8,188	(\$811)	
<b>Casualty &amp; Liability</b>	<b>\$34,046</b>	<b>\$28,332</b>	<b>\$24,305</b>	<b>\$34,895</b>	<b>\$10,591</b>	<b>43.6%</b>
Insurance	\$16,158	\$15,243	\$17,419	\$18,357	\$938	
Claims	\$17,888	\$13,089	\$6,885	\$16,539	\$9,653	
<b>Leases</b>	<b>\$5,769</b>	<b>\$6,183</b>	<b>\$6,796</b>	<b>\$6,725</b>	<b>(\$71)</b>	<b>-1.0%</b>
Property	\$2,046	\$2,021	\$2,610	\$2,143	(\$466)	
Equipment	\$3,723	\$4,162	\$4,186	\$4,581	\$395	
<b>Miscellaneous</b>	<b>\$961</b>	<b>\$2,447</b>	<b>\$4,282</b>	<b>(\$37,730)</b>	<b>(\$42,012)</b>	<b>-981.1%</b>
Dues And Subscriptions	\$315	\$381	\$483	\$514	\$31	
Conferences and Meetings	\$142	\$99	\$243	\$335	\$93	
Business Travel/Public Hrg	\$380	\$307	\$727	\$415	(\$312)	
Interview & Relocation	\$834	\$1,077	\$729	\$1,752	\$1,023	
Advertising	\$2,970	\$2,702	\$2,472	\$2,796	\$324	
Other	\$1,015	\$554	\$2,905	\$865	(\$2,040)	
Reimbursements	(\$4,695)	(\$2,673)	(\$3,277)	(\$1,408)	\$1,869	
Capital Allocation	\$0	\$0	\$0	(\$43,000)	(\$43,000)	
<b>TOTAL NONPERSONNEL COST</b>	<b>\$443,884</b>	<b>\$448,870</b>	<b>\$483,649</b>	<b>\$435,690</b>	<b>(\$47,959)</b>	<b>-9.9%</b>
<b>TOTAL COST</b>	<b>\$1,639,570</b>	<b>\$1,661,216</b>	<b>\$1,814,028</b>	<b>\$1,735,347</b>	<b>(\$78,681)</b>	<b>-4.3%</b>

<b>FY2017 PROPOSED BUDGET OPERATING EXPENSE BY MODE Authority-Wide</b>				
<i>(Dollars in Thousands)</i>	<b>TOTAL</b>	<b>BUS</b>	<b>RAIL</b>	<b>Metro Access</b>
<b>Salaries</b>	<b>\$338,996</b>	<b>\$114,759</b>	<b>\$216,554</b>	<b>\$7,683</b>
Full-Time Salaries	\$349,883	\$120,737	\$221,245	\$7,901
Salary Lapse	-\$24,738	-\$7,896	-\$16,594	-\$247
Overtime Salaries	\$13,851	\$1,918	\$11,903	\$30
<b>Wages</b>	<b>\$547,197</b>	<b>\$244,003</b>	<b>\$302,746</b>	<b>\$448</b>
Operator/StaMgr Wages	\$251,440	\$151,291	\$100,149	\$0
Operator/StaMgr Overtime	\$41,439	\$26,157	\$15,282	\$0
Full Time Wages	\$243,235	\$61,422	\$181,403	\$410
Wage Lapse	(\$10,589)	(\$2,296)	(\$8,276)	(\$17)
Overtime Wages	\$21,672	\$7,429	\$14,187	\$56
<b>TOTAL SALARIES AND WAGES</b>	<b>\$886,193</b>	<b>\$358,762</b>	<b>\$519,299</b>	<b>\$8,132</b>
<b>Fringes</b>	<b>\$413,464</b>	<b>\$167,300</b>	<b>\$242,163</b>	<b>\$4,002</b>
<b>TOTAL PERSONNEL COST</b>	<b>\$1,299,657</b>	<b>\$526,061</b>	<b>\$761,463</b>	<b>\$12,133</b>
<b>Services</b>	<b>\$213,660</b>	<b>\$44,620</b>	<b>\$65,039</b>	<b>\$104,001</b>
Management Fee	\$428	\$0	\$428	\$0
Professional & Technical	\$42,262	\$11,876	\$27,010	\$3,376
Temporary Help	\$3,303	\$1,265	\$1,976	\$62
Contract Maintenance	\$45,755	\$19,028	\$26,335	\$392
Custodial Services	\$85	\$85	\$0	\$0
Paratransit	\$98,704	\$0	\$0	\$98,704
Other	\$23,124	\$12,365	\$9,291	\$1,468
<b>Materials &amp; Supplies</b>	<b>\$97,989</b>	<b>\$38,496</b>	<b>\$51,590</b>	<b>\$7,903</b>
Fuel and Lubricants	\$13,802	\$3,031	\$3,183	\$7,588
Tires	\$5,886	\$5,585	\$300	\$0
Other	\$78,302	\$29,880	\$48,107	\$316
<b>Fuel &amp; Propulsion</b>	<b>\$80,297</b>	<b>\$31,493</b>	<b>\$48,804</b>	<b>\$0</b>
Diesel Fuel	\$26,674	\$26,221	\$454	\$0
Propulsion Power	\$50,850	\$0	\$50,850	\$0
Clean Natural Gas	\$2,773	\$5,273	-\$2,500	\$0
<b>Utilities (Total)</b>	<b>\$39,854</b>	<b>\$15,295</b>	<b>\$23,795</b>	<b>\$763</b>
Electricity and Gas	\$31,666	\$12,304	\$18,737	\$625
Utilities - Other	\$8,188	\$2,991	\$5,058	\$138
<b>Casualty &amp; Liability</b>	<b>\$34,895</b>	<b>\$13,547</b>	<b>\$20,686</b>	<b>\$663</b>
Insurance	\$18,357	\$7,130	\$10,878	\$349
Claims	\$16,539	\$6,417	\$9,808	\$314
<b>Leases (Total)</b>	<b>\$6,725</b>	<b>\$2,045</b>	<b>\$3,838</b>	<b>\$842</b>
Property	\$2,143	\$479	\$913	\$752
Equipment	\$4,581	\$1,566	\$2,926	\$89
<b>Miscellaneous</b>	<b>(\$37,730)</b>	<b>(\$14,777)</b>	<b>(\$22,257)</b>	<b>(\$697)</b>
Dues And Subscriptions	\$514	\$196	\$307	\$11
Conferences and Meetings	\$335	\$111	\$213	\$11
Business Travel/Public Hrg	\$415	\$122	\$269	\$24
Interview & Relocation	\$1,752	\$681	\$1,039	\$33
Advertising	\$2,796	\$1,073	\$1,670	\$53
Other	\$865	\$317	\$535	\$13
Reimbursements	(\$1,408)	(\$593)	(\$790)	(\$25)
Capital Allocation	(\$43,000)	(\$16,684)	(\$25,499)	(\$817)
<b>TOTAL NONPERSONNEL COST</b>	<b>\$435,690</b>	<b>\$130,718</b>	<b>\$191,495</b>	<b>\$113,477</b>
<b>TOTAL COST</b>	<b>\$1,735,347</b>	<b>\$656,780</b>	<b>\$952,958</b>	<b>\$125,610</b>

## Operating Budget by Mode: Metrobus

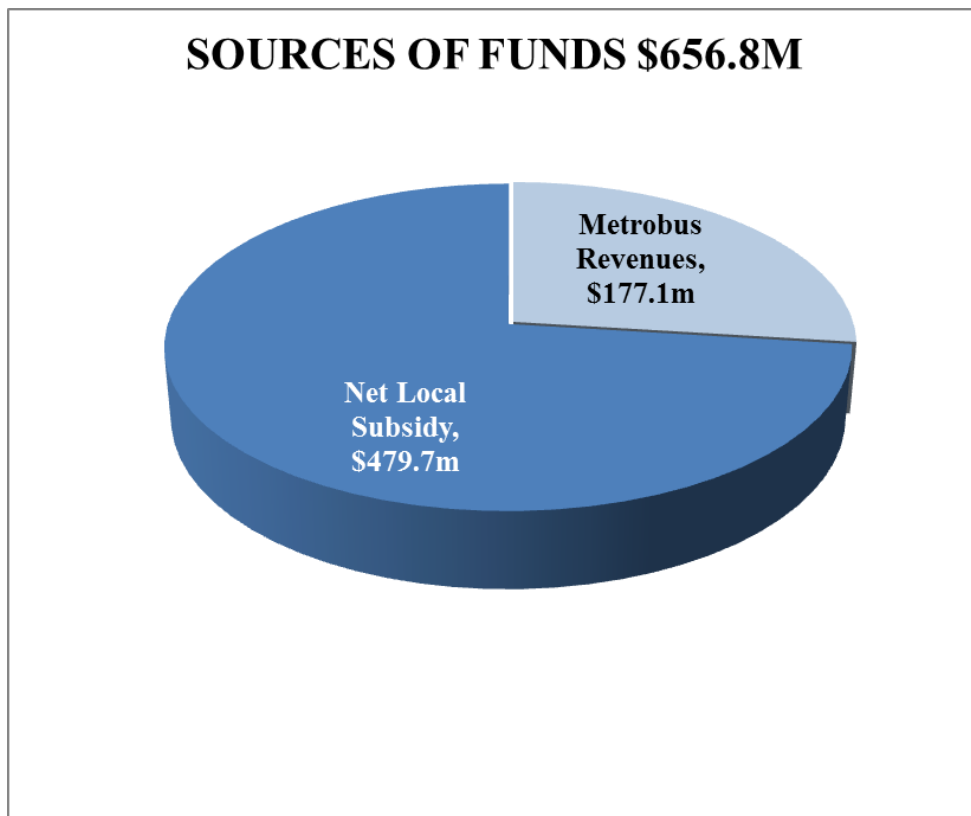
### *Sources of Funds*

For FY2017 Proposed Budget, Metrobus revenues include system revenue (primarily passenger fares and advertising) and subsidy from Metro's jurisdictional partners.

Total Metrobus revenue in FY2017 is projected at \$177.1 million. The largest revenue component is passenger revenues, which includes fares and passes, estimated at \$158.3 million. This represents a decrease of \$7.2 million over the FY2016 budget. The decrease in fare and pass revenues is tied to a projected ridership decrease of 4.5 million trips.

Advertising revenue attributed to Metrobus is projected to generate \$15.7 million. This amount is \$2.0 million higher than the FY2016 budget.

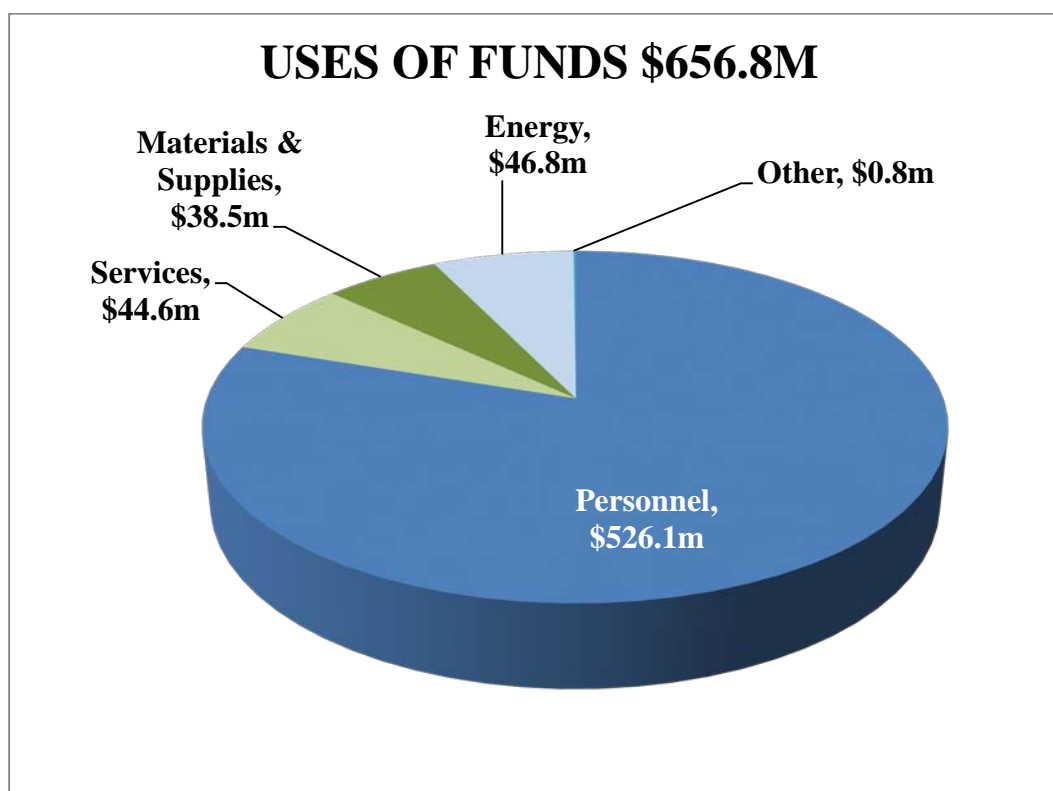
Other Revenue, which includes rental revenue, third-party reimbursements, and other miscellaneous sources, will contribute \$3.1 million in FY2017.



### *Uses of Funds*

Total personnel expenses make up the largest portion of the Metrobus budget. For FY2017, personnel cost is estimated at \$526.1 million or 80.1 percent of the Metrobus budget, which represents an increase of \$18.4 million over the FY2016 budget. This increase reflects committed wage and benefit growth, additional staffing for the FTA mandated safety corrective actions and accounts for the revised method for allocation of indirect costs. This increase is partially offset by the transfer of preventive maintenance costs to the CIP.

Services are budgeted at \$44.6 million, which is \$7.0 million greater than the FY2016 budget. The increase reflects projected inflation associated with camera maintenance and voice technology solution services in support of Metrobus, as well as increases due to the revised method of allocating indirect costs. Materials and Supplies are budgeted at \$38.5 million, which is \$2.6 million more than the FY2016 budget. The increase aligns the budget to address historical material utilization to maintain buses. Energy costs, which include diesel, Clean Natural Gas (CNG), gasoline, and utilities, are budgeted at \$46.8 million. This amount is \$8.1 million greater than FY2016 primarily due to the revised method of allocating indirect costs. The increase is offset by service level reductions of 4.5 million trips and lower fuel costs. Other expenses proposed for Metrobus total \$0.8 million, a decrease of \$13.7 million over the FY2016 budget primarily due to the updated cost allocation methodology.

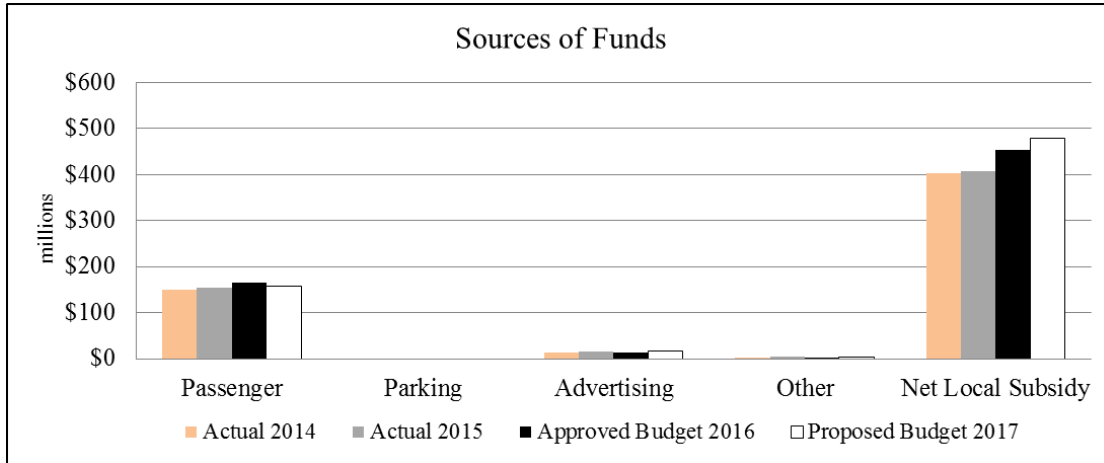


*Note: Excludes operating reimbursable projects and debt service.*

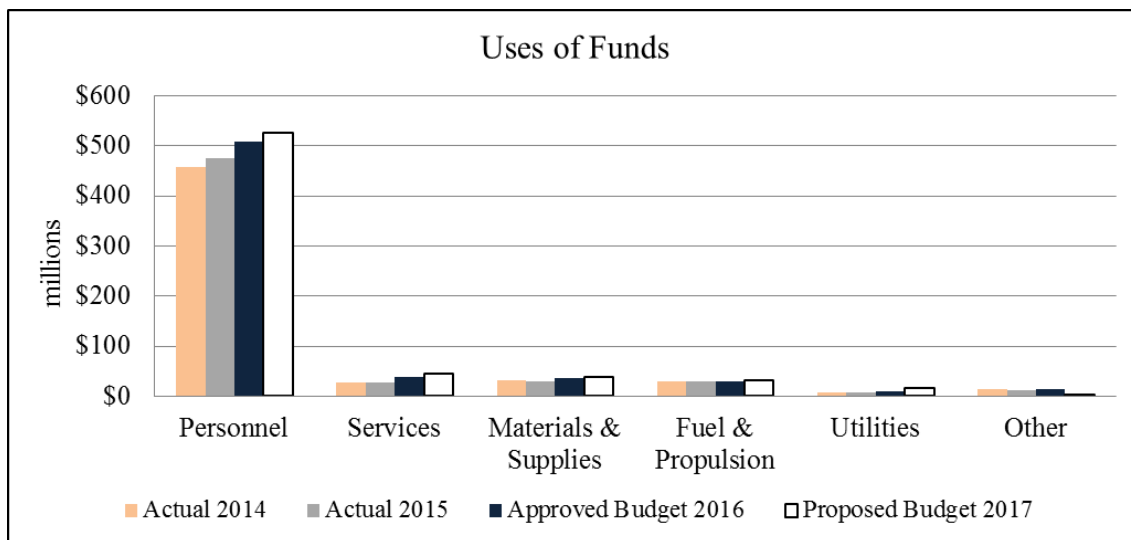
<b>METROBUS BY ACCOUNT</b>					
	<b>Actual 2014</b>	<b>Actual 2015</b>	<b>Approved Budget 2016</b>	<b>Proposed Budget 2017</b>	<b>Variance</b>
<b>REVENUES</b>					
Passenger	\$141,421	\$145,691	\$156,835	\$151,620	(\$5,216)
Other Passenger	\$8,404	\$9,480	\$8,725	\$6,725	(\$2,000)
Parking	\$0	\$410	\$0	\$0	\$0
Advertising	\$13,297	\$14,956	\$13,695	\$15,699	\$2,004
Joint Development	\$0	\$0	\$0	\$0	\$0
Fiber Optics	\$0	\$0	\$0	\$0	\$0
Other	\$1,875	\$5,569	\$2,080	\$3,080	\$1,000
Interest	\$25	\$17	\$0	\$0	\$0
<b>Total Revenues</b>	<b>\$165,022</b>	<b>\$176,123</b>	<b>\$181,335</b>	<b>\$177,124</b>	<b>(\$4,211)</b>
<b>EXPENSES</b>					
Personnel	\$458,614	\$475,746	\$507,695	\$526,061	\$18,367
Services	\$26,967	\$28,009	\$37,582	\$44,620	\$7,037
Materials & Supplies	\$31,184	\$29,488	\$35,850	\$38,496	\$2,646
Fuel & Propulsion Power	\$30,251	\$29,626	\$29,728	\$31,493	\$1,766
Utilities	\$7,821	\$6,641	\$8,948	\$15,295	\$6,347
Casualty & Liability	\$13,196	\$10,855	\$9,421	\$13,547	\$4,126
Leases & Rentals	\$1,204	\$1,262	\$2,250	\$2,045	(\$205)
Miscellaneous	(\$230)	\$773	\$2,841	\$1,907	(\$934)
Capital Allocation	\$0	\$0	\$0	(\$16,684)	(\$16,684)
<b>Total Expenses</b>	<b>\$569,006</b>	<b>\$582,399</b>	<b>\$634,314</b>	<b>\$656,780</b>	<b>\$22,466</b>
<b>GROSS SUBSIDY</b>	<b>\$403,985</b>	<b>\$406,276</b>	<b>\$452,978</b>	<b>\$479,655</b>	<b>\$26,677</b>
Preventive Maint	(\$10,438)	(\$10,438)	(\$10,438)	\$0	\$10,438
<b>Net Local Subsidy</b>	<b>\$393,547</b>	<b>\$395,838</b>	<b>\$442,540</b>	<b>\$479,655</b>	<b>\$37,115</b>
<b>Cost Recovery Ratio</b>	<b>29.0%</b>	<b>30.2%</b>	<b>28.6%</b>	<b>27.0%</b>	



Net local subsidy for Metrobus grew by \$2.3 million or 0.6 percent to \$395.8 million from FY2014 to FY2015 and is budgeted to grow by \$37.1 million or 8.4 percent to \$479.7 million from FY2016 to FY2017.



Personnel costs grew by \$17.1 million or 3.7 percent from FY2014 to FY2015 and are projected to grow by \$18.4 million or 3.6 percent from FY2016 to FY2017, primarily due to contractually obligated wage and benefit increases. Services increased by \$1.0 million or 3.9 percent from FY2014 to FY2015 and are projected to increase by \$7.0 million or 18.7 percent from FY2016 to FY2017. Materials and Supplies decreased by \$1.7 million or 5.4 percent from FY2014 to FY2015 and are projected to increase by \$2.7 million or 7.4 percent from FY2016 to FY2017. Fuel costs decreased by \$0.6 million or 2.1 percent from FY2014 to FY2015 and is projected to increase by \$1.8 million or 5.9 percent from FY2016 to FY2017. Casualty & Liability cost decreased by \$2.3 million or 17.7 percent from FY2014 to FY2015 and is projected to increase by \$4.1 million or 43.8 percent from FY2016 to FY2017. Other expenses decreased by \$2.4 million from FY2016 to FY2017 due to the updated cost allocation methodology.



OPERATING EXPENSE BUDGET METROBUS MODE						
	Actual	Actual	Approved	Proposed		
<i>(Dollars in Thousands)</i>	2014	2015	Budget	Budget	\$ Variance	% Change
<b>Salaries</b>	<b>\$67,162.9</b>	<b>\$71,054</b>	<b>\$81,075</b>	<b>\$114,759</b>	<b>\$33,684</b>	<b>42%</b>
Full-Time Salaries	\$65,350	\$69,507	\$80,209	\$120,737	\$40,527	
Salary Lapse	\$0	\$0	(\$2,284)	(\$7,896)	(\$5,612)	
Overtime Salaries	\$1,813	\$1,546	\$3,150	\$1,918	(\$1,232)	
<b>Wages</b>	<b>\$242,180.9</b>	<b>\$242,537</b>	<b>\$260,150</b>	<b>\$244,003</b>	<b>(\$16,146)</b>	<b>-6%</b>
Operator/StaMgr Wages	\$146,621	\$159,768	\$160,390	\$151,291	(\$9,099)	
Operator/StaMgr Overtime	\$30,593	\$24,627	\$24,350	\$26,157	\$1,807	
Full Time Wages	\$59,546	\$53,309	\$71,127	\$61,422	(\$9,705)	
Wage Lapse	\$0	\$0	(\$2,544)	(\$2,296)	\$248	
Overtime Wages	\$5,421	\$4,833	\$6,827	\$7,429	\$603	
<b>TOTAL SALARIES AND WAGES</b>	<b>\$309,343.8</b>	<b>\$313,591</b>	<b>\$341,224</b>	<b>\$358,762</b>	<b>\$17,538</b>	<b>5%</b>
<b>Fringes</b>	<b>\$149,270.3</b>	<b>\$162,155</b>	<b>\$166,470</b>	<b>\$167,300</b>	<b>\$829</b>	<b>0%</b>
<b>TOTAL PERSONNEL COST</b>	<b>\$458,614.1</b>	<b>\$475,746</b>	<b>\$507,695</b>	<b>\$526,061</b>	<b>\$18,367</b>	<b>4%</b>
<b>Services</b>	<b>\$26,967.0</b>	<b>\$28,009</b>	<b>\$37,582</b>	<b>\$44,620</b>	<b>\$7,037</b>	<b>19%</b>
Professional & Technical	\$6,156	\$6,991	\$7,363	\$11,876	\$4,512	
Temporary Help	\$95	\$382	\$847	\$1,265	\$419	
Contract Maintenance	\$15,493	\$16,715	\$19,379	\$19,028	(\$350)	
Custodial Services	\$25	\$46	\$83	\$85	\$2	
Paratransit	\$2	\$29	\$0	\$0	\$0	
Other	\$5,195	\$3,848	\$9,911	\$12,365	\$2,454	
<b>Materials &amp; Supplies</b>	<b>\$31,183.9</b>	<b>\$29,488</b>	<b>\$35,850</b>	<b>\$38,496</b>	<b>\$2,646</b>	<b>7%</b>
Fuel and Lubricants	\$3,290	\$2,866	\$5,043	\$3,031	(\$2,011)	
Tires	\$5,540	\$5,695	\$6,662	\$5,585	(\$1,077)	
Other	\$22,354	\$20,927	\$24,145	\$29,880	\$5,734	
<b>Fuel &amp; Propulsion</b>	<b>\$30,251.0</b>	<b>\$29,626</b>	<b>\$29,728</b>	<b>\$31,493</b>	<b>\$1,766</b>	<b>6%</b>
Diesel Fuel	\$27,102	\$27,046	\$26,784	\$26,221	(\$564)	
Propulsion Power	\$0	\$1,133	\$0	\$0	\$0	
Clean Natural Gas	\$3,149	\$1,447	\$2,943	\$5,273	\$2,329	
<b>Utilities</b>	<b>\$7,820.6</b>	<b>\$6,641</b>	<b>\$8,948</b>	<b>\$15,295</b>	<b>\$6,347</b>	<b>71%</b>
Electricity and Gas	\$5,242	\$5,178	\$6,488	\$12,304	\$5,816	
Utilities - Other	\$2,578	\$1,463	\$2,460	\$2,991	\$531	
<b>Casualty &amp; Liability</b>	<b>\$13,195.6</b>	<b>\$10,855</b>	<b>\$9,421</b>	<b>\$13,547</b>	<b>\$4,126</b>	<b>44%</b>
Insurance	\$6,262	\$5,840	\$6,752	\$7,130	\$377	
Claims	\$6,933	\$5,015	\$2,669	\$6,417	\$3,748	
<b>Leases</b>	<b>\$1,204.3</b>	<b>\$1,262</b>	<b>\$2,250</b>	<b>\$2,045</b>	<b>(\$205)</b>	<b>-9%</b>
Property	\$421	\$380	\$789	\$479	(\$311)	
Equipment	\$783	\$882	\$1,460	\$1,566	\$106	
<b>Miscellaneous</b>	<b>(\$230)</b>	<b>\$773</b>	<b>\$2,841</b>	<b>(\$14,777)</b>	<b>(\$17,618)</b>	<b>-620%</b>
Dues And Subscriptions	\$121	\$146	\$186	\$196	\$10	
Conferences and Meetings	\$36	\$36	\$78	\$111	\$33	
Business Travel/Public Hrg	\$95	\$74	\$182	\$122	(\$60)	
Interview & Relocation	\$323	\$409	\$379	\$681	\$301	
Advertising	\$1,209	\$1,640	\$1,265	\$1,073	(\$193)	
Other	\$175	\$59	\$1,069	\$317	(\$752)	
Reimbursements	(\$2,189)	(\$1,590)	(\$320)	(\$593)	(\$273)	
Capital Allocation	\$0	\$0	\$0	(\$16,684)	(\$16,684)	
<b>TOTAL NONPERSONNEL COST</b>	<b>\$110,392.4</b>	<b>\$106,653</b>	<b>\$126,619</b>	<b>\$130,718</b>	<b>\$4,099</b>	<b>3%</b>
<b>TOTAL COST</b>	<b>\$569,006.4</b>	<b>\$582,399</b>	<b>\$634,314</b>	<b>\$656,780</b>	<b>\$22,466</b>	<b>4%</b>

## Operating Budget by Mode: Metrorail

### *Sources of Funds*

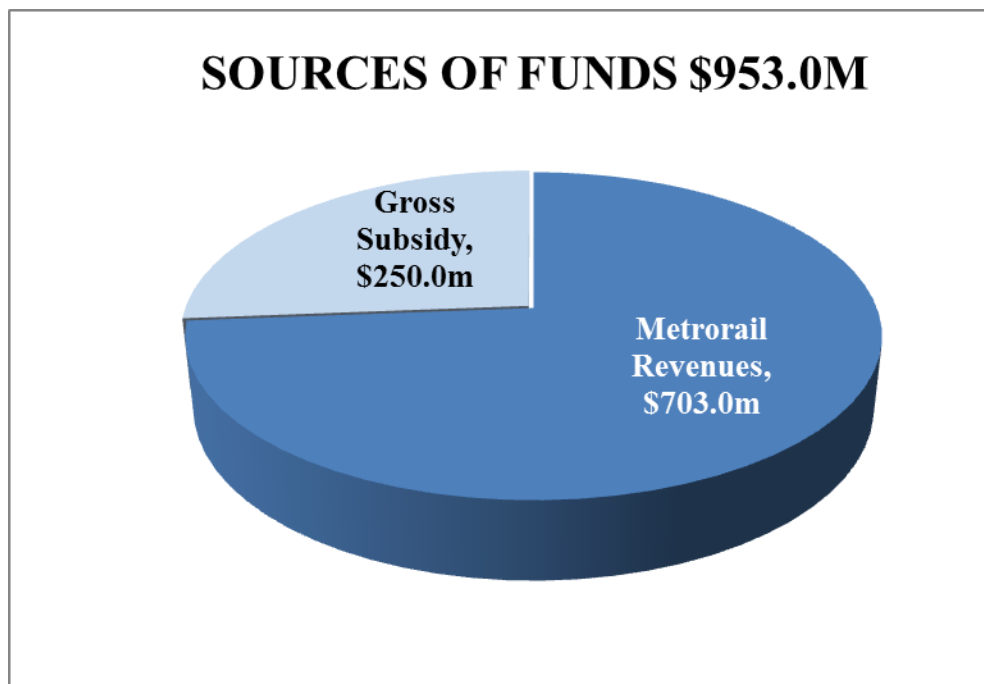
In the FY2017 Proposed Budget, as with Metrobus, Metrorail revenues include both system revenue (primarily passenger fares and parking fees, as well as advertising and lease revenues) and subsidy from Metro's jurisdictional partners.

Passenger revenues, including fares and passes, are projected at \$702.9 million. This represents a decrease of \$45.2 million from the FY2016 budget. The decrease in fare and passenger revenues is tied to a projected ridership reduction of 8.4 million passenger trips.

Parking revenue at Metrorail garages will contribute \$46.1 million in revenue. This amount is \$2.9 million lower than the FY2016 budget due to declining ridership.

Advertising revenue attributed to Metrorail is projected to generate \$7.8 million in FY2017. This amount is \$1.0 million higher than the FY2016 budget.

Other Revenue, which includes Joint Development, Fiber Optics, and other miscellaneous revenue sources, is projected to contribute \$34.4 million in FY2017. This is a decrease of \$22.0 million from FY2016 primarily due to the one-time usage of Transit Infrastructure Investment Fund (TIIF).



**Uses of Funds**

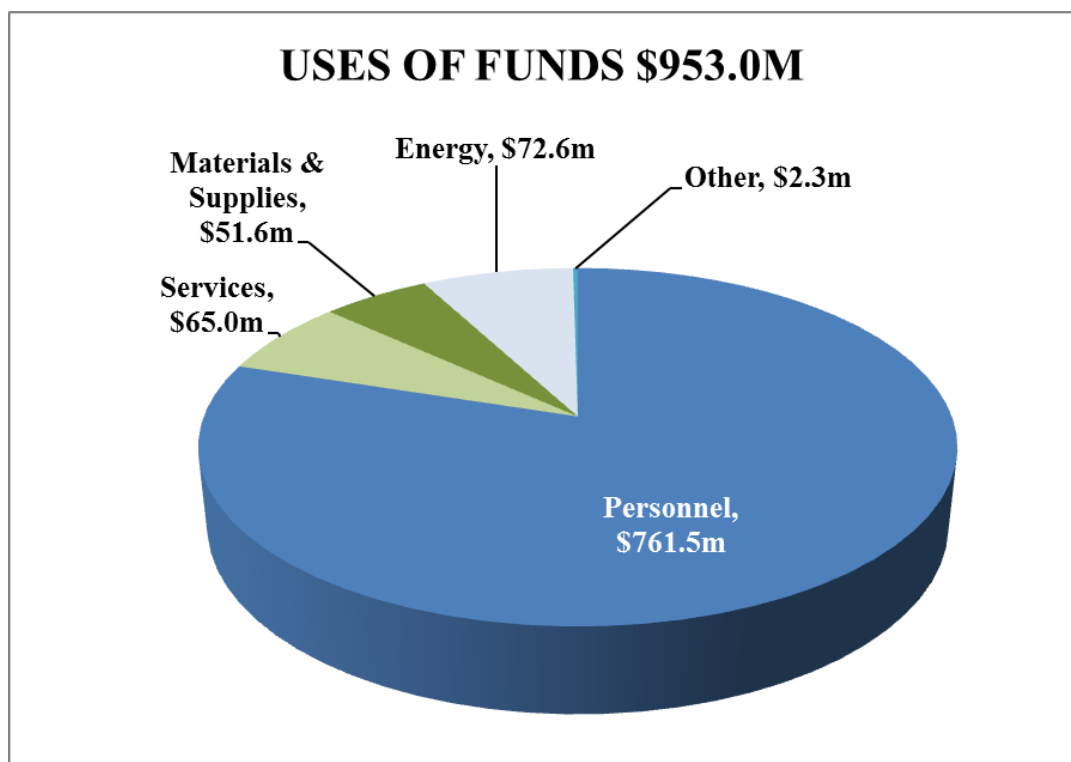
Total personnel expenses make up the largest portion of the Metrorail budget. For FY2017, personnel costs are estimated at \$761.5 million, or 81.7 percent of the Metrorail budget, which represents a decrease of \$51.4 million from the FY2016 budget. This decrease is mostly due to the transfer of preventive maintenance costs to the CIP offset by contractually obligated wage increases, additional staffing for FTA required safety corrective actions and also accounts for the updated cost allocation methodology.

Services are budgeted at \$65.0 million, which is \$12.1 million lower than the FY2016 budget. The reduction represents budgeted efficiencies within various services in support of Metrorail.

Materials and Supplies are budgeted at \$51.6 million, which is \$12.7 million lower than the FY2016 budget. This decrease is primarily driven by the proposed transfer of preventive maintenance and heavy overhaul activities from the Operating budget to the Capital Improvement Program (CIP).

Energy costs include fuel, propulsion and utilities; and are budgeted at \$72.6 million. This amount is \$12.6 million lower than the FY2016 budget. This decrease is based on reductions in projected hourly Kilowatt consumption and the impact of the updated cost allocation methodology.

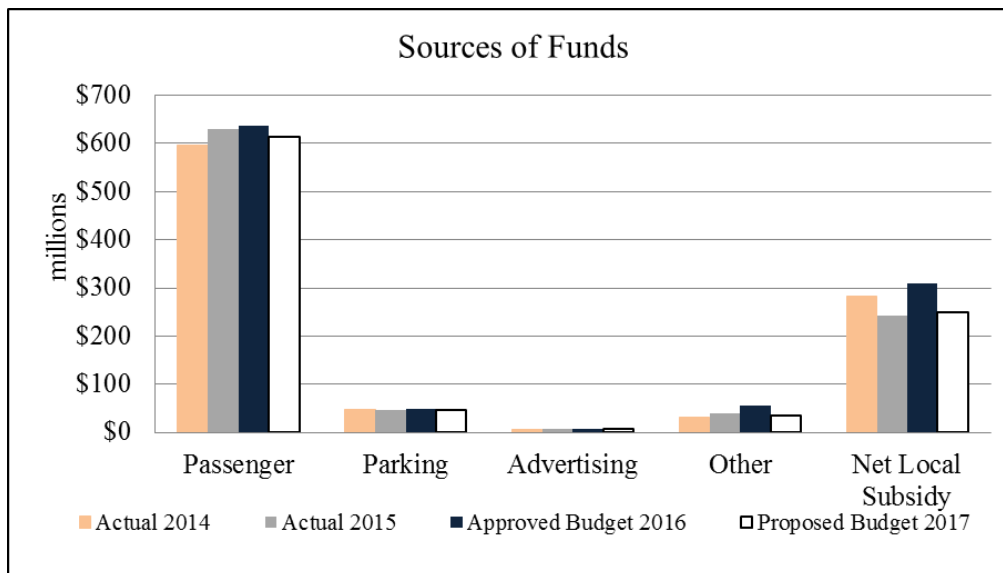
Other expenses proposed for Metrorail total \$24.5 million, an increase of \$6.8 million from the FY2016 budget.



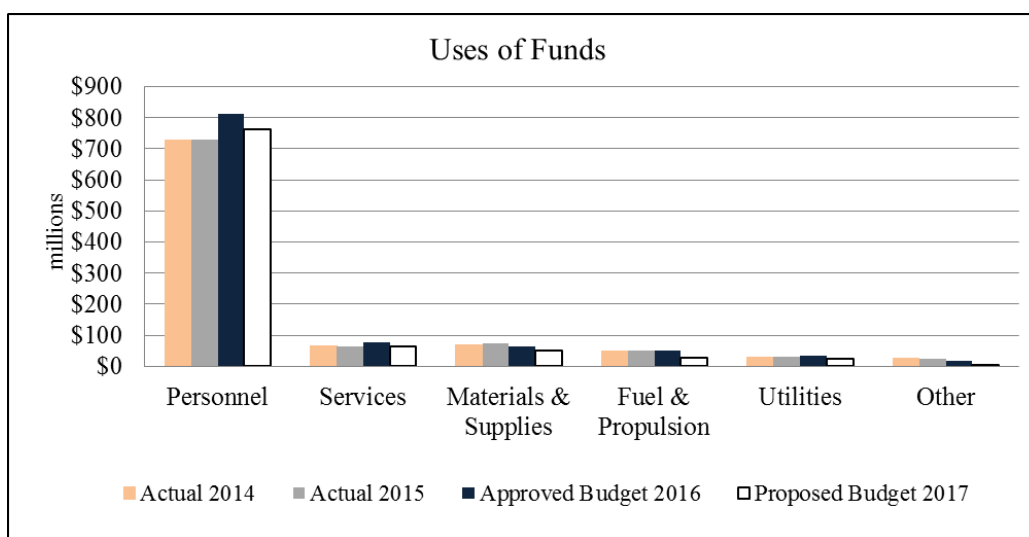
*Note: Excludes reimbursable operating projects and debt service.*

<b>METRORAIL BY ACCOUNT</b>					
<b>(Dollars in Thousands)</b>	<b>Actual 2014</b>	<b>Actual 2015</b>	<b>Approved Budget 2016</b>	<b>Proposed Budget 2017</b>	<b>Variance</b>
<b>REVENUES</b>					
Passenger	\$593,324	\$626,965	\$632,133	\$606,800	(\$25,333)
Other Passenger	\$3,410	\$2,090	\$3,818	\$7,818	\$4,000
Parking	\$46,614	\$46,103	\$49,000	\$46,103	(\$2,897)
Advertising	\$6,549	\$7,466	\$6,805	\$7,801	\$996
Joint Development	\$7,360	\$6,161	\$8,000	\$7,000	(\$1,000)
Fiber Optics	\$15,467	\$15,441	\$16,500	\$16,500	\$0
Other	\$8,334	\$17,754	\$31,909	\$10,909	(\$21,000)
Interest	(\$181)	\$6	\$0	\$0	\$0
<b>Total Revenues</b>	<b>\$680,876</b>	<b>\$721,986</b>	<b>\$748,164</b>	<b>\$702,930</b>	<b>(\$45,234)</b>
<b>EXPENSES</b>					
Personnel	\$729,150	\$727,798	\$812,880	\$761,463	(\$51,417)
Services	\$64,120	\$63,178	\$77,181	\$65,039	(\$12,142)
Materials & Supplies	\$68,939	\$72,235	\$64,254	\$51,590	(\$12,664)
Fuel & Propulsion Power	\$48,705	\$50,175	\$51,847	\$48,804	(\$3,043)
Utilities	\$28,212	\$29,315	\$33,354	\$23,795	(\$9,559)
Casualty & Liability	\$20,216	\$16,926	\$14,429	\$20,686	\$6,256
Leases & Rentals	\$3,842	\$4,151	\$3,253	\$3,838	\$586
Miscellaneous	\$1,165	\$1,615	\$1,316	\$3,242	\$1,926
Capital Allocation	\$0	\$0	\$0	(\$25,499)	(\$25,499)
<b>Total Expenses</b>	<b>\$964,348</b>	<b>\$965,392</b>	<b>\$1,058,513</b>	<b>\$952,958</b>	<b>(\$105,555)</b>
<b>GROSS SUBSIDY</b>	<b>\$283,473</b>	<b>\$243,406</b>	<b>\$310,349</b>	<b>\$250,027</b>	<b>(\$60,321)</b>
Preventive Maintenance	(\$20,262)	(\$20,262)	(\$20,262)	\$0	\$20,262
<b>Net Local Subsidy</b>	<b>\$263,211</b>	<b>\$223,144</b>	<b>\$290,087</b>	<b>\$250,027</b>	<b>(\$40,059)</b>
<b>Cost Recovery Ratio</b>	<b>70.6%</b>	<b>74.8%</b>	<b>70.7%</b>	<b>73.8%</b>	<b>42.9%</b>

Passenger fare revenue, the main source of revenue, is projected at \$614.6 million in FY2017. The projected net local subsidy for FY2017 is \$229.3 million, a decrease of \$81.0 million from the FY2016 budget.



Personnel costs declined by \$1.4 million or 0.2 percent from FY2014 to FY2015 and are projected to decrease by \$51.4 million or 6.3 percent from FY2016 to FY2017, primarily related to a change in the funding source for heavy overhaul and preventive maintenance expenses. Services decreased by \$0.9 million or 1.5 percent from FY2014 to FY2015 and are projected to decrease by \$12.1 million or 15.7 percent from FY2016 to FY2017. Materials and Supplies increased by \$3.3 million or 4.8 percent from FY2014 to FY2015 and are projected to decrease by \$12.7 million or 19.7 percent from FY2016 to FY2017 mainly due to the change in the funding source for heavy overhaul and preventive maintenance.



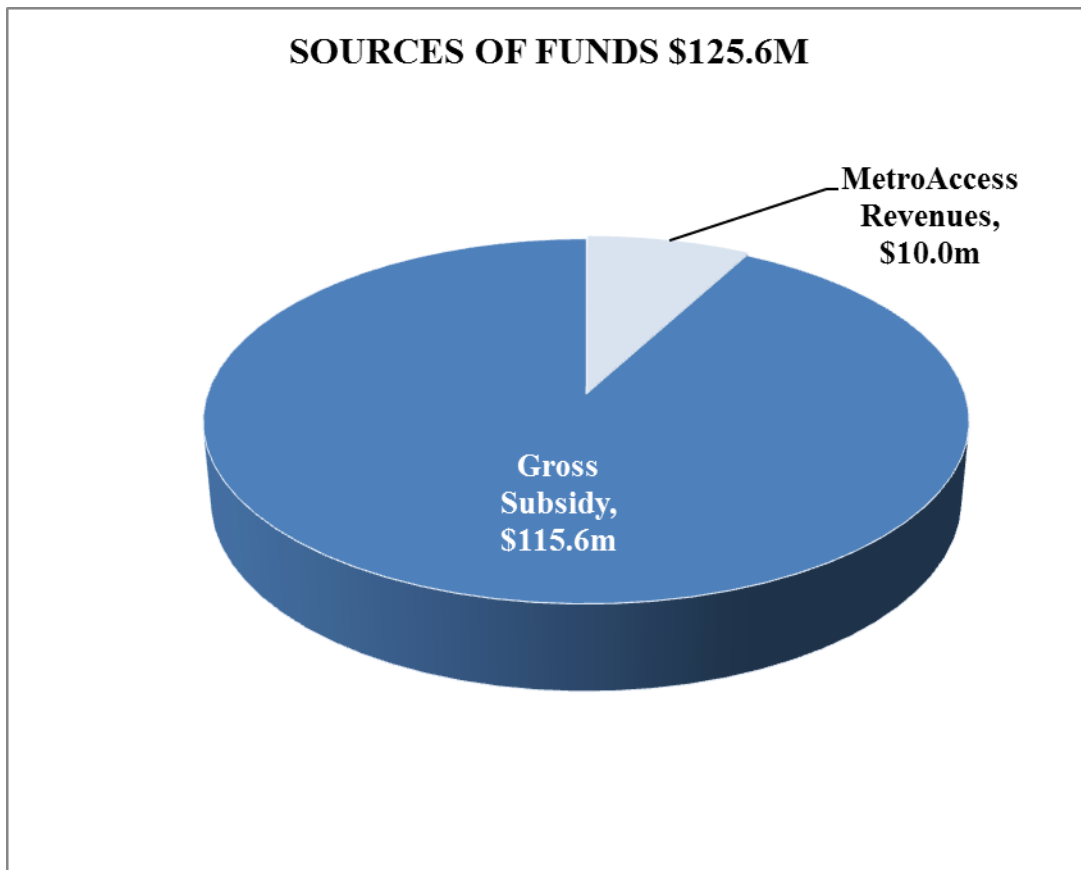
<b>METRORAIL MODE</b>						
<i>(Dollars in Thousands)</i>	<b>Actual 2014</b>	<b>Actual 2015</b>	<b>Approved Budget 2016</b>	<b>Proposed Budget 2017</b>	<b>\$ Variance</b>	<b>% Change</b>
<b>Salaries</b>	<b>\$181,692</b>	<b>\$185,186</b>	<b>\$205,117</b>	<b>\$216,554</b>	<b>\$11,437</b>	<b>6%</b>
Full-Time Salaries	\$170,261	\$175,202	\$199,277	\$221,245	\$21,969	
Salary Lapse	\$0	\$0	(\$4,836)	(\$16,594)	(\$11,759)	
Overtime Salaries	\$11,431	\$9,984	\$10,676	\$11,903	\$1,227	
<b>Wages</b>	<b>\$311,107</b>	<b>\$300,686</b>	<b>\$346,755</b>	<b>\$302,746</b>	<b>(\$44,009)</b>	<b>-13%</b>
Operator/StaMgr Wages	\$77,902	\$83,632	\$96,215	\$100,149	\$3,934	
Operator/StaMgr Overtime	\$15,033	\$16,548	\$19,153	\$15,282	(\$3,871)	
Full Time Wages	\$204,408	\$188,967	\$225,108	\$181,403	(\$43,705)	
Wage Lapse	\$0	\$0	(\$7,225)	(\$8,276)	(\$1,050)	
Operator Wage Lapse	\$0	\$0	\$0	\$0	\$0	
Station Manager Wage Lapse	\$0	\$0	\$0	\$0	\$0	
Overtime Wages	\$13,763	\$11,537	\$13,504	\$14,187	\$683	
<b>TOTAL SALARIES AND WAGES</b>	<b>\$492,798.9</b>	<b>\$485,871</b>	<b>\$551,872</b>	<b>\$519,299</b>	<b>(\$32,572)</b>	<b>-6%</b>
<b>Fringes</b>	<b>\$236,351</b>	<b>\$241,926</b>	<b>\$261,008</b>	<b>\$242,163</b>	<b>(\$18,845)</b>	<b>-7%</b>
<b>TOTAL PERSONNEL COST</b>	<b>\$729,150</b>	<b>\$727,798</b>	<b>\$812,880</b>	<b>\$761,463</b>	<b>(\$51,417)</b>	<b>-6%</b>
<b>Services</b>	<b>\$64,120</b>	<b>\$63,178</b>	<b>\$77,181</b>	<b>\$65,039</b>	<b>(\$12,142)</b>	<b>-16%</b>
Management Fee	\$129	\$143	\$160	\$428	\$268	
Professional & Technical	\$9,736	\$12,353	\$17,790	\$27,010	\$9,219	
Temporary Help	\$2,013	\$2,885	\$1,855	\$1,976	\$121	
Contract Maintenance	\$27,588	\$22,550	\$28,997	\$26,335	(\$2,662)	
Custodial Services	\$0	\$1	\$0	\$0	\$0	
Paratransit	\$0	\$0	\$0	\$0	\$0	
Other	\$24,654	\$25,246	\$28,379	\$9,291	(\$19,088)	
<b>Materials &amp; Supplies</b>	<b>\$68,939</b>	<b>\$72,235</b>	<b>\$64,254</b>	<b>\$51,590</b>	<b>(\$12,664)</b>	<b>-20%</b>
Fuel and Lubricants	\$3,120	\$2,394	\$6,293	\$3,183	(\$3,110)	
Tires	\$186	\$125	\$253	\$300	\$48	
Other	\$65,633	\$69,715	\$57,708	\$48,107	(\$9,602)	
<b>Fuel &amp; Propulsion</b>	<b>\$48,705</b>	<b>\$50,175</b>	<b>\$51,847</b>	<b>\$48,804</b>	<b>(\$3,043)</b>	<b>-6%</b>
Diesel Fuel	\$397	\$3	\$0	\$454	\$454	
Propulsion Power	\$48,218	\$50,172	\$55,383	\$50,850	(\$4,532)	
Clean Natural Gas	\$89	\$0	(\$3,536)	(\$2,500)	\$1,036	
<b>Utilities - Other</b>	<b>\$28,212</b>	<b>\$29,315</b>	<b>\$33,354</b>	<b>\$23,795</b>	<b>(\$9,559)</b>	<b>-29%</b>
Electricity and Gas	\$24,177	\$24,166	\$26,873	\$18,737	(\$8,136)	
Utilities - Other	\$4,034	\$5,149	\$6,481	\$5,058	(\$1,423)	
<b>Casualty &amp; Liability</b>	<b>\$20,216</b>	<b>\$16,926</b>	<b>\$14,429</b>	<b>\$20,686</b>	<b>\$6,256</b>	<b>43%</b>
Insurance	\$9,594	\$9,106	\$10,341	\$10,878	\$537	
Claims	\$10,622	\$7,820	\$4,089	\$9,808	\$5,719	
<b>Leases</b>	<b>\$3,842</b>	<b>\$4,151</b>	<b>\$3,253</b>	<b>\$3,838</b>	<b>\$586</b>	<b>18%</b>
Property	\$942	\$913	\$670	\$913	\$242	
Equipment	\$2,900	\$3,238	\$2,582	\$2,926	\$344	
<b>Miscellaneous</b>	<b>\$1,165</b>	<b>\$1,615</b>	<b>\$1,316</b>	<b>(\$22,257)</b>	<b>(\$23,573)</b>	<b>-1791%</b>
Dues And Subscriptions	\$188	\$227	\$287	\$307	\$20	
Conferences and Meetings	\$100	\$56	\$152	\$213	\$61	
Business Travel/Public Hrg	\$269	\$218	\$512	\$269	(\$243)	
Interview & Relocation	\$495	\$645	\$325	\$1,039	\$714	
Tolls	\$0	\$0	\$0	\$0	\$0	
Advertising	\$1,754	\$1,058	\$1,202	\$1,670	\$468	
Other	\$840	\$494	\$1,795	\$535	(\$1,260)	
Reimbursements	(\$2,481)	(\$1,082)	(\$2,957)	(\$790)	\$2,167	-73%
Capital Allocation	\$0	\$0	\$0	(\$25,499)	(\$25,499)	
<b>TOTAL NONPERSONNEL COST</b>	<b>\$235,198</b>	<b>\$237,595</b>	<b>\$245,633</b>	<b>\$191,495</b>	<b>(\$54,138)</b>	<b>-22%</b>
<b>TOTAL COST</b>	<b>\$964,348</b>	<b>\$965,392</b>	<b>\$1,058,513</b>	<b>\$952,958</b>	<b>(\$105,555)</b>	<b>-10%</b>

## Operating Budget by Mode: MetroAccess

### *Sources of Funds*

MetroAccess revenues include passenger revenue and net subsidy from Metro’s jurisdictional partners.

MetroAccess passenger revenues are projected at \$10.0 million. This represents a growth of \$1.5 million or 17.3 percent over the FY2016 Approved budget. The growth in fare revenue is tied to a projected ridership increase of 0.1 million trips in FY2017.

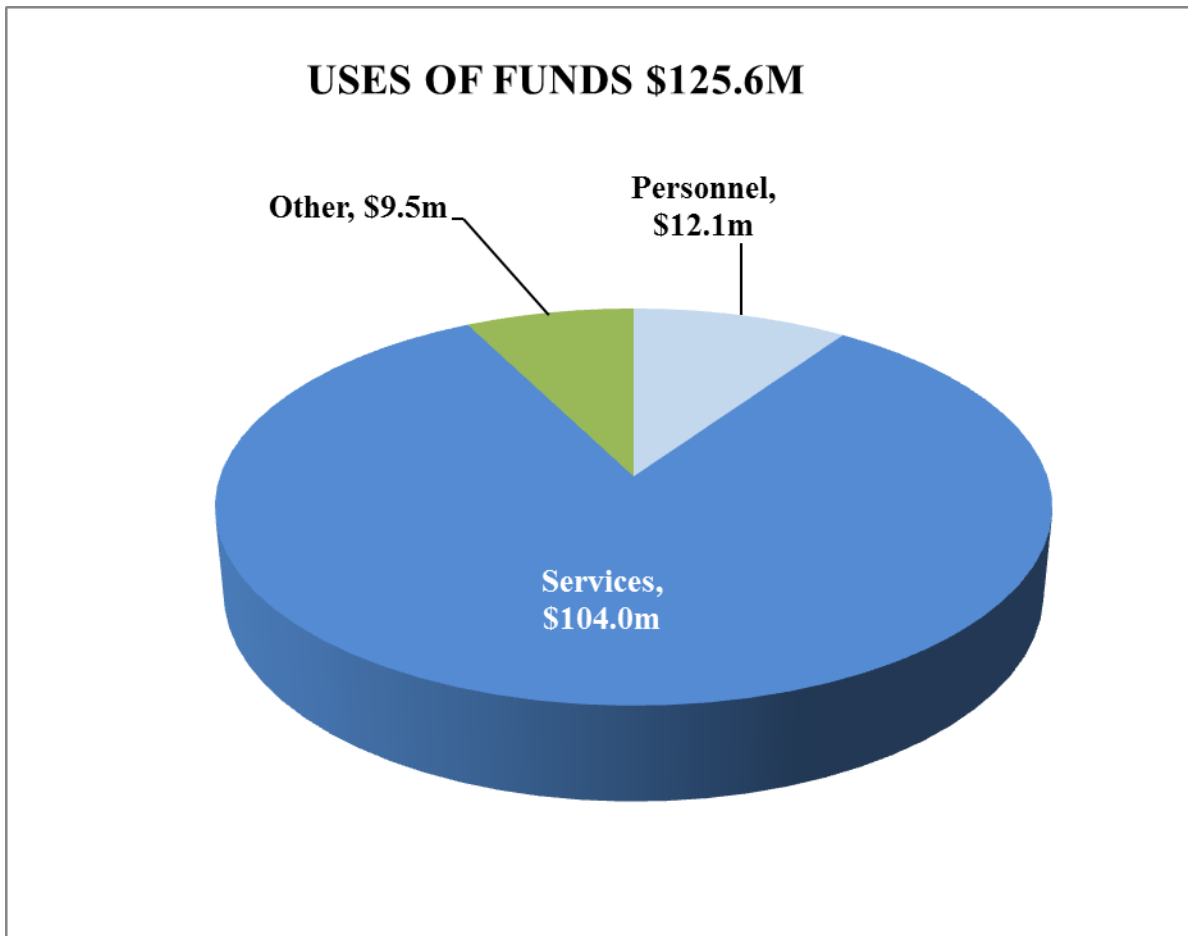




**Uses of Funds**

Paratransit services accounts for 95.0 percent of total MetroAccess proposed budget. For FY2017, paratransit services cost is estimated at \$98.7 million and represents an increase of \$5.7 million over the FY2016 budget. This increase reflects an increase in projected ridership of 0.1 million trips.

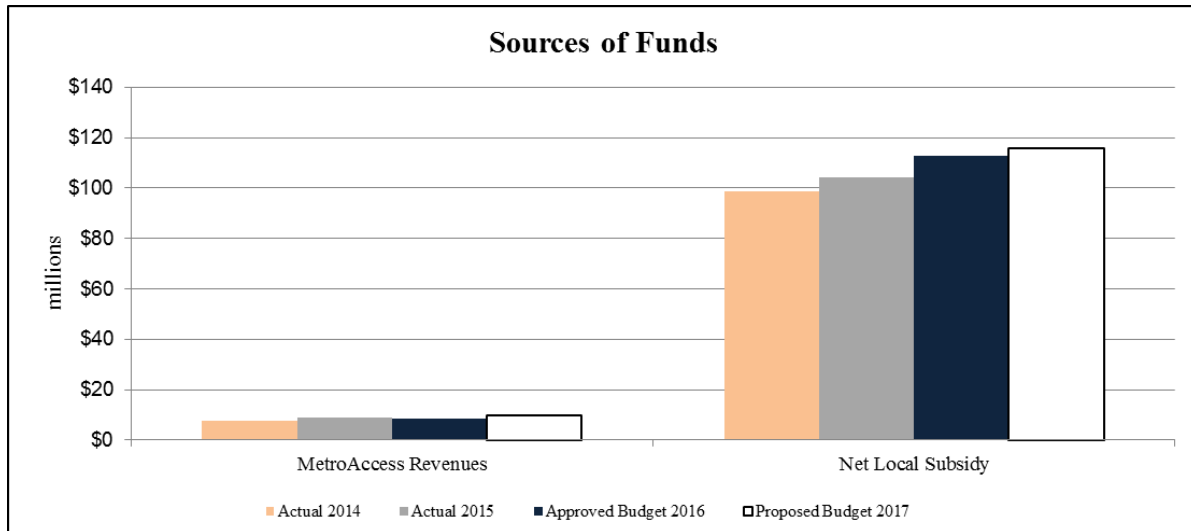
Personnel costs are budgeted at \$12.1 million, which is a \$2.3 million increase to the FY2016 budget. The increase reflects the updated cost allocation methodology. Other expenses, consisting primarily of fuel, total \$9.5 million, a decrease of \$3.4 million over the FY2016 budget.



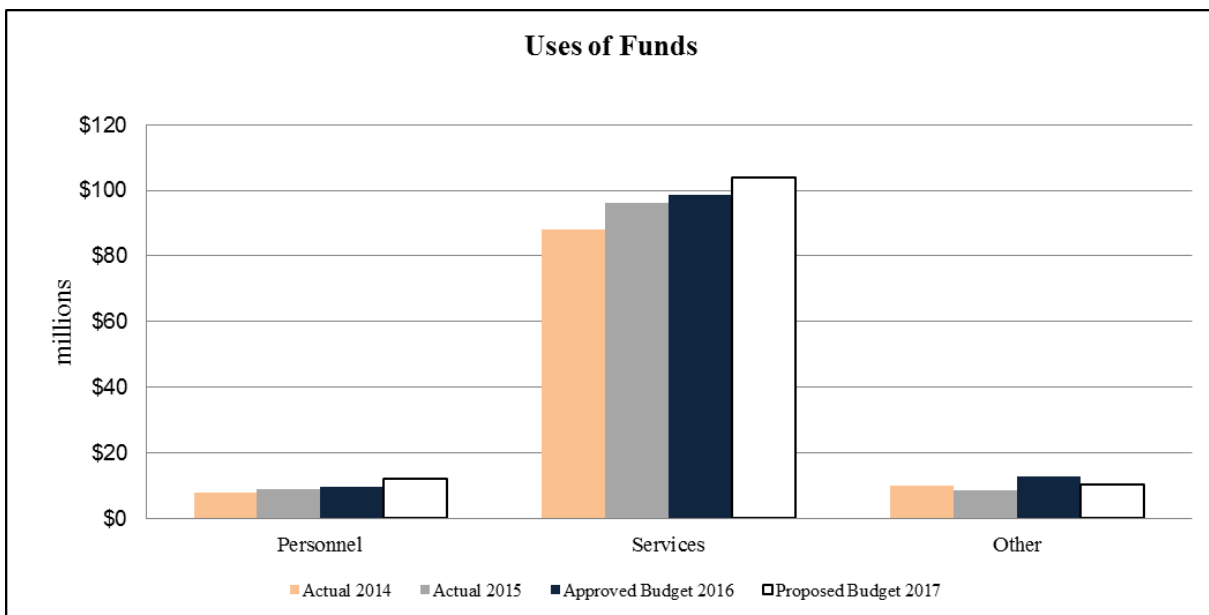
*Note: Excludes reimbursable operating projects*

<b>METROACCESS BY ACCOUNT</b>					
	<b>Actual</b>	<b>Actual</b>	<b>Approved</b>	<b>Proposed</b>	
<b>(Dollars in Thousands)</b>	<b>2014</b>	<b>2015</b>	<b>Budget</b>	<b>Budget</b>	<b>Variance</b>
			<b>2016</b>	<b>2017</b>	
<b>REVENUES</b>					
Passenger	\$7,542	\$9,045	\$8,500	\$9,972	\$1,472
Other Passenger	\$0	\$0	\$0	\$0	\$0
Parking	\$0	\$0	\$0	\$0	\$0
Advertising	\$0	\$0	\$0	\$0	\$0
Joint Development	\$0	\$0	\$0	\$0	\$0
Fiber Optics	\$0	\$0	\$0	\$0	\$0
Other	(\$1)	\$0	\$0	\$0	\$0
Interest	\$0	\$0	\$0	\$0	\$0
<b>Total Revenues</b>	<b>\$7,542</b>	<b>\$9,045</b>	<b>\$8,500</b>	<b>\$9,972</b>	<b>\$1,472</b>
<b>EXPENSES</b>					
Personnel	\$7,922	\$8,802	\$9,805	\$12,133	\$2,328
Services	\$88,148	\$96,166	\$98,487	\$104,001	\$5,515
Materials & Supplies	\$8,692	\$7,009	\$10,938	\$7,903	(\$3,034)
Fuel & Propulsion Power	\$0	\$0	\$0	\$0	\$0
Utilities	\$70	\$67	\$99	\$763	\$665
Casualty & Liability	\$634	\$552	\$454	\$663	\$209
Leases & Rentals	\$723	\$770	\$1,294	\$842	(\$452)
Miscellaneous	\$26	\$58	\$126	\$120	(\$5)
Capital Allocation	\$0	\$0	\$0	(\$817)	(\$817)
<b>Total Expenses</b>	<b>\$106,215</b>	<b>\$113,424</b>	<b>\$121,201</b>	<b>\$125,610</b>	<b>\$4,408</b>
<b>Net Local Subsidy</b>	<b>\$98,674</b>	<b>\$104,380</b>	<b>\$112,701</b>	<b>\$115,638</b>	<b>\$2,937</b>
<b>Cost Recovery Ratio</b>	<b>7.1%</b>	<b>8.0%</b>	<b>7.0%</b>	<b>7.9%</b>	

Net local subsidy increased by \$5.7 million or 5.8 percent from FY2014 to FY2015 and is projected to increase by \$3.9 million or 3.5 percent from FY2016 to FY2017. Passenger revenue is expected to increase by \$1.5 million or 17.3 percent in FY2017 in line with ridership projections.



Paratransit service contract expenses increased by \$2.3 million or 2.4 percent from FY2014 to FY2016, and are projected to increase by \$5.5 million or 5.6 percent from FY2016 to FY2017.



OPERATING EXPENSE BUDGET						
METROACCESS MODE						
	Actual	Actual	Approved	Proposed		
<i>(Dollars in Thousands)</i>	2014	2015	Budget	Budget	\$ Variance	% Change
			2016	2017		
<b>Salaries</b>	<b>\$5,314</b>	<b>\$5,680</b>	<b>\$6,540</b>	<b>\$7,683</b>	<b>\$1,143</b>	17%
Full-Time Salaries	\$5,294	\$5,662	\$6,534	\$7,901	\$1,367	
Salary Lapse	\$0	\$0	(\$123)	(\$247)	(\$125)	
Overtime Salaries	\$20	\$18	\$129	\$30	(\$99)	
<b>Wages</b>	<b>(\$147)</b>	<b>\$235</b>	<b>\$191</b>	<b>\$448</b>	<b>\$257</b>	134%
Full Time Wages	\$102	\$234	\$187	\$410	\$222	
Wage Lapse	\$0	\$0	(\$4)	(\$17)	(\$13)	
Overtime Wages	\$5	\$2	\$8	\$56	\$47	
<b>TOTAL SALARIES AND WAGES</b>	<b>\$5,167</b>	<b>\$5,915</b>	<b>\$6,731</b>	<b>\$8,132</b>	<b>\$1,400</b>	<b>21%</b>
<b>Fringes</b>	<b>\$2,755</b>	<b>\$2,887</b>	<b>\$3,073</b>	<b>\$4,002</b>	<b>\$928</b>	30%
<b>TOTAL PERSONNEL COST</b>	<b>\$7,922</b>	<b>\$8,802</b>	<b>\$9,805</b>	<b>\$12,133</b>	<b>\$2,328</b>	
<b>Services</b>	<b>\$88,148</b>	<b>\$96,166</b>	<b>\$98,487</b>	<b>\$104,001</b>	<b>\$5,515</b>	6%
Management Fee	\$0	\$0	\$6	\$0	(\$6)	
Professional & Technical	\$1,367	\$2,245	\$3,708	\$3,376	(\$331)	
Temporary Help	\$4	\$19	\$5	\$62	\$57	
Contract Maintenance	\$296	\$318	\$398	\$392	(\$6)	
Paratransit	\$85,274	\$92,797	\$92,957	\$98,704	\$5,747	
Other	\$1,207	\$786	\$1,413	\$1,468	\$55	
<b>Materials &amp; Supplies</b>	<b>\$8,692</b>	<b>\$7,009</b>	<b>\$10,938</b>	<b>\$7,903</b>	<b>(\$3,034)</b>	-28%
Fuel and Lubricants	\$8,502	\$6,824	\$10,700	\$7,588	(\$3,112)	
Other	\$189	\$185	\$238	\$316	\$78	
<b>Fuel &amp; Propulsion</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	
Propulsion Power	\$0	\$0	\$0	\$0	\$0	
<b>Utilities</b>	<b>\$70</b>	<b>\$67</b>	<b>\$99</b>	<b>\$763</b>	<b>\$665</b>	672%
Electricity and Gas	\$41	\$32	\$41	\$625	\$584	
Utilities - Other	\$29	\$35	\$58	\$138	\$80	
<b>Casualty &amp; Liability</b>	<b>\$634</b>	<b>\$552</b>	<b>\$454</b>	<b>\$663</b>	<b>\$209</b>	46%
Insurance	\$301	\$297	\$326	\$349	\$23	
Claims	\$333	\$255	\$128	\$314	\$186	
<b>Leases</b>	<b>\$723</b>	<b>\$770</b>	<b>\$1,294</b>	<b>\$842</b>	<b>(\$452)</b>	-35%
Property	\$683	\$728	\$1,150	\$752	(\$398)	
Equipment	\$40	\$42	\$144	\$89	(\$54)	
<b>Miscellaneous</b>	<b>\$26</b>	<b>\$58</b>	<b>\$126</b>	<b>(\$697)</b>	<b>(\$822)</b>	-655%
Dues And Subscriptions	\$6	\$9	\$9	\$11	\$2	
Conferences and Meetings	\$6	\$7	\$12	\$11	(\$1)	
Business Travel/Public Hrg	\$17	\$16	\$33	\$24	(\$9)	
Interview & Relocation	\$16	\$23	\$25	\$33	\$8	
Advertising	\$6	\$4	\$4	\$53	\$49	
Other	\$0	\$0	\$41	\$13	(\$28)	
Reimbursements	(\$25)	\$0	\$0	(\$25)	(\$25)	
Capital Allocation	\$0	\$0	\$0	(\$817)	(\$817)	
<b>TOTAL NONPERSONNEL COST</b>	<b>\$98,294</b>	<b>\$104,622</b>	<b>\$111,397</b>	<b>\$113,477</b>	<b>\$2,080</b>	<b>2%</b>
<b>TOTAL COST</b>	<b>\$106,215</b>	<b>\$113,424</b>	<b>\$121,201</b>	<b>\$125,610</b>	<b>\$4,408</b>	<b>4%</b>

## Reimbursable Operating Budget

Reimbursable projects are those unique services, programs, or projects for which separate funding has been arranged with a jurisdiction or third-party entity. The Operating Budget discussed to this point does not include these amounts.

<b>FY2017 Reimbursable Operating Projects</b> <i>(Dollars in Thousands)</i>				
	FY2015 Approved Budget	FY2016 Approved Budget	FY2017 Proposed Budget	Change
<b>State &amp; Local Funding</b>				
• DC Circulator <sup>1</sup>	\$19,460	\$23,030	\$22,775	-\$255
<b>Federal Grant Funding</b>				
• Safety & Security grants	17,160	5,706	4,703	-1,003
• Takoma/Langley Park Transit Center	-	533	-	-533
• Bus Bridges/Transit Works	1,383	1,383	618	-765
<b>Other Sources of Funding</b>				
• DC Circulator - Passenger fare revenue	3,394	3,613	3,316	-297
• Neutral Host agreement with Carrier team	6,172	6,349	-	-6,349
• Joint Development & Adjacent Construction projects	6,418	6,709	2,789	-3,920
<b>Total Expenditures</b>	<b>\$53,987</b>	<b>\$47,323</b>	<b>\$34,201</b>	<b>-\$13,122</b>

<sup>1</sup> Local funding equals expenditures less passenger revenue.

### *DC Circulator*

The DC Circulator is a partnership between the District Department of Transportation, Washington Metropolitan Authority Transit Authority and DC Surface Transit Inc. Metro serves as the contract manager, verifying provisions of service, and providing technical advice. The cost for operating and managing the contract service are fully reimbursed by the District of Columbia.

### *Safety and Security Grants*

WMATA receives several Security grants through the Transit Security Grant Program (TSGP) and National Explosive Detection Canine Team Program (NEDCTP) under the Department of Homeland Security. These grants provide funding for capital and operational security activities. Such funding enhances the ability of the Metro Transit Police Department to detect and deter potential attacks of terrorism through increased visibility, unpredictable presence, identification of areas for critical infrastructure hardening, and employee and public awareness. The existing grants are scheduled to be implemented through the end of FY2017. As new Congressional appropriations become available, WMATA will actively pursue new funding to further enhance security activities.

---

***Joint Development and Adjacent Construction Projects***

The Metro Office of Joint Development and Adjacent Construction (JDAC) reviews and approves construction activities for those jurisdictional projects adjacent to Metrorail and Metrobus property, facilities, and operations in order to ensure that: Metro facilities and operations are not damaged or affected by the proposed project; Metro operations are not affected during and after the project construction; and Metro station capacity is not affected by the ridership generated by the project. Expenditures are reimbursed by the private or jurisdiction entity.

To achieve these objectives, JDAC performs the following:

- JDAC reviews adjacent projects to determine if there are impacts to WMATA interests.
- JDAC acts similar to the development review and permitting offices of the jurisdictions.
- Provides coordination with Owner/Developer/Contractor (ODC): agencies, jurisdictions, property owners, consultants, developers, utilities and/or anyone who has impact to WMATA property, facilities and/or operations.
- In conjunction with Real Estate and Station Area Planning (LAND) and General Counsel (COUN) prepares Project Agreements.
- Provide coordination/oversight for all aspects of a project including: design, safety, operations, constructability, assures compliance with WMATA standards, monitors /coordinates construction activities and accepts on-site installations and facilities.
- Provides oversight and acceptance for Joint Development and Jurisdictional Reimbursable projects that will ultimately be owned and operated by WMATA.

<b>OPERATING REIMBURSABLES</b>				
<i>(Dollars in Thousands)</i>	<b>TOTAL</b>	<b>MTPD</b>	<b>BUS</b>	<b>DGMO</b>
<b>Salaries</b>	<b>\$4,091</b>	<b>\$2,314</b>	<b>\$339</b>	<b>\$1,438</b>
Full-Time Salaries	\$3,991	\$2,314	\$287	\$1,391
<b>Wages</b>	<b>\$361</b>	<b>\$0</b>	<b>\$116</b>	<b>\$245</b>
Overtime Wages	\$361	\$0	\$116	\$245
<b>TOTAL SALARIES AND WAGES</b>	<b>\$4,453</b>	<b>\$2,314</b>	<b>\$455</b>	<b>\$1,684</b>
<b>Fringes</b>	<b>\$1,935</b>	<b>\$1,005</b>	<b>\$198</b>	<b>\$732</b>
Fringe Health/Pension/Other	\$1,935	\$1,005	\$198	\$732
<b>TOTAL PERSONNEL COST</b>	<b>\$6,388</b>	<b>\$3,319</b>	<b>\$653</b>	<b>\$2,416</b>
<b>Services</b>	<b>\$23,686</b>	<b>\$0</b>	<b>\$23,600</b>	<b>\$86</b>
Professional & Technical	\$80	\$0	\$0	\$80
Contract Maintenance	\$23,309	\$0	\$23,309	\$0
Other	\$297	\$0	\$290	\$7
<b>Materials &amp; Supplies</b>	<b>\$303</b>	<b>\$0</b>	<b>\$192</b>	<b>\$111</b>
Other	\$303	\$0	\$192	\$111
<b>Fuel &amp; Propulsion</b>	<b>\$2,264</b>	<b>\$0</b>	<b>\$2,264</b>	<b>\$0</b>
Diesel Fuel	\$1,904	\$0	\$1,904	\$0
Clean Natural Gas	\$360	\$0	\$360	\$0
<b>Miscellaneous</b>	<b>\$1,560</b>	<b>\$1,384</b>	<b>\$0</b>	<b>\$176</b>
Other	\$1,560	\$1,384	\$0	\$176
<b>TOTAL NONPERSONNEL COST</b>	<b>\$27,813</b>	<b>\$1,384</b>	<b>\$26,055</b>	<b>\$374</b>
<b>TOTAL COST</b>	<b>\$34,201</b>	<b>\$4,703</b>	<b>\$26,708</b>	<b>\$2,790</b>

## Departmental Details

The following information in this chapter summarizes the budgeted resources necessary to deliver on Metro departments' committed actions in support of the Authority-wide Strategic Goals and in fulfillment of the GM/CEO's Business Plan. Metro's Business Planning process provides the framework for aligning employees' day-to-day activities with organizational goals. These plans help align employee actions with the departmental business plans, which in turn, support the GM/CEO business plan.

Business plans are structured and orientated to the department (not enterprise) level with one-to-three year horizons and, annual assessments. The Proposed FY2017 operating and capital budget allocates resources to key business plan priorities and actions including:

**Goal 1: Build and Maintain a Premier Safety Culture and System**

- NTSB Recommendations and Safety Management Initiatives (SMI) requirements
- Employee Fatigue Management Plan
- Confidential Close Call Reporting System
- Safety and Security Awareness and Response

**Goal 2: Meet or Exceed Customer Expectations by Consistently Delivering Quality Service**

- Customer Care Program
- Fare Payments Program
- Metrobus Service Improvements
  - State of Good Operations, Priority Corridor Network, Better Bus Initiatives
- Metrorail Service Improvements
  - 7000 Series Railcar Delivery and Acceptance Testing
  - Automatic Train Control
  - Escalator and Elevator Reliability
  - Proactive Public Participation Plan

**Goal 3: Improve Regional Mobility and Connect Communities**

- Silver Line Phase II Preparation
- Metroway Bus Rapid Transit Expansion
- Bus Stop and Pathways Accessibility
- Momentum Advancement – Metro 2025
- Connect Greater Washington – The Regional Transit System Plan

**Goal 4: Ensure Financial Stability and Invest in our People and Assets**

- Financial Management Reforms
- Capital Funding Agreement
- Human Capital Plan
- Transit Asset Management
- Collaborative Risk Management



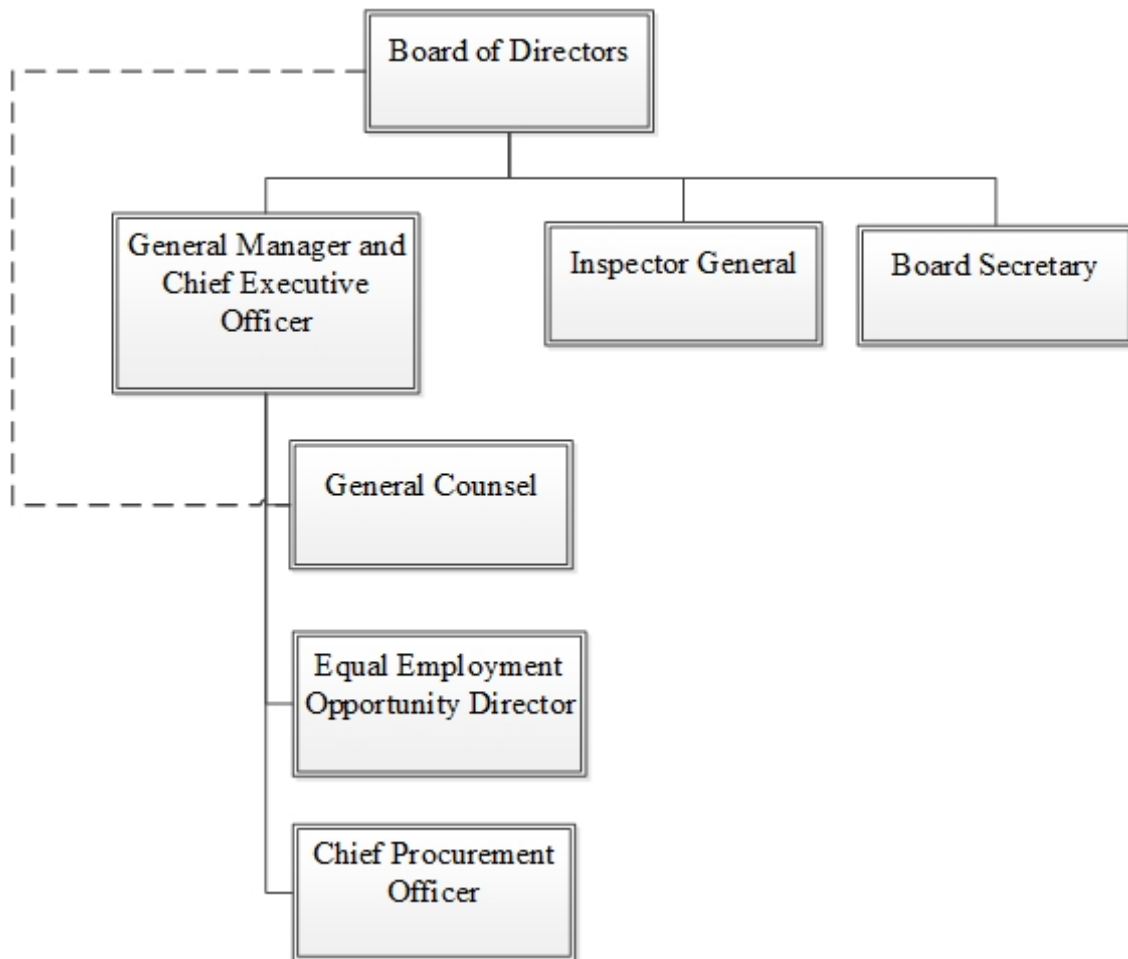


The GM/CEO’s Business Plan includes Key Performance Indicators that monitor results and define success through targets. The Board of Directors tracks the agency’s KPIs on a quarterly basis and evaluates the GM/CEO at year end based on Metro’s performance results. Customers and stakeholders can monitor Metro’s performance at [www.wmata.com/about\\_metro/scorecard/](http://www.wmata.com/about_metro/scorecard/).

The department highlights in this chapter reflect the efforts and accomplishments of the departments in support of the Authority-wide strategic goals and the GM/CEO’s business plan.

Historical data for FY2014-FY2016 presented in the tables that follow may not accurately reflect each department’s previous budget/actuals due to reorganization within Metro. This does not affect the authority-wide overall total.

### Independent Offices



**General Manager and Chief Executive Officer**

	Actual	Actual	Approved	Proposed		
<i>(Dollars in Thousands)</i>	2014	2015	Budget	Budget	Change	Variance
			2016	2017		
PERSONNEL COST	\$848	\$983	\$949	\$1,109	\$161	16.9%
NONPERSONNEL COST	\$238	\$148	\$84	\$172	\$88	104.9%
<b>TOTAL COST</b>	<b>\$1,085</b>	<b>\$1,131</b>	<b>\$1,033</b>	<b>\$1,282</b>	<b>\$249</b>	<b>24.1%</b>
<b>BUDGETED POSITIONS</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>-</b>	<b>0.0%</b>

The General Manager/Chief Executive Officer is responsible for the safe and reliable operation of the nation's second largest rail transit system, sixth largest bus network and fourth busiest paratransit service. At the direction of the GM/CEO, a budgeted workforce of approximately 12,950 works to provide more than one million passenger trips a day. The GM/CEO provides strategic guidance to meet the travel needs of those living and visiting the National Capital Region, and ensure that Metro continues to play a role in sustaining the region's economic vitality.

In FY2017, Metro continues its focus on safety and security, service reliability and financial reform. The Authority is working diligently to address safety reviews and implement recommendations made in the previous year by oversight partners, including the National Transportation Safety Board (NTSB) and Federal Transit Administration (FTA). Improvements to safety and infrastructure are critical to providing the service and reliability that Metro customers expect and to build and maintain ridership. Metro also will continue working to achieve state of good repair and provide transparent information on Metro's performance.

With the customer satisfaction survey as a guide, the organization is committed to improving day to day train and bus service reliability, along with customer care within stations, on trains and buses. An enterprise-wide customer care initiative is underway serving as a framework for the whole organization to deliver better service for every customer touch point in the system. Furthermore, Metro remains focused on improving financial management, ensuring compliance with FTA regulations and putting processes and procedures in place to strengthen the organization's financial foundation.

To continue the path of improvement, the GM/CEO's Business Plan focuses Metro's operating budget, capital program and business actions on the goals and strategies established in the Momentum Strategic Plan.

The Business Plan highlights for CY2015 – CY2017 for each of the four Strategic Goals include actions to address the following activities:

Strategic Goal:	Actions:
Build and maintain a premier safety culture and system	<ul style="list-style-type: none"> <li>• Complete National Transportation Safety Board recommendations.</li> <li>• Introduce 7000 Series rail cars, replacing the 1000 series cars.</li> <li>• Implement the Safety Management Inspection action plan.</li> <li>• Improve safety and security for customers and employees.</li> <li>• Implement a wayside worker warning system.</li> <li>• Continue the establishment of a new national transit industry standard for employee fatigue risk management.</li> <li>• Upgrade radio system and wireless availability.</li> </ul>
Meet or exceed customer expectations by consistently delivering quality service	<ul style="list-style-type: none"> <li>• Expand the enterprise-wide customer care initiative.</li> <li>• Introduce faster bus service and new Bus Priority Corridor Networks.</li> <li>• Continue bus stop improvements.</li> <li>• Continue and assess Automatic train operation (ATO).</li> <li>• Complete additional Escalator and Elevator rehabilitations and replacements.</li> <li>• Introduce better fare pass products.</li> <li>• Implement fare policy changes.</li> </ul>
Ensure fiscal stability and invest in our people and assets	<ul style="list-style-type: none"> <li>• Implement and continue Financial Reform.</li> <li>• Implement new Capital Funding Agreement.</li> <li>• Enhance Human Capital Planning.</li> <li>• Continue Transit Asset Management.</li> <li>• Assess Collaborative Risk Management.</li> <li>• Implement administrative expense reductions.</li> <li>• Implement the findings of the Board efficiency work plan.</li> <li>• Maximize non-fare revenues.</li> </ul>
Improve regional mobility and connect communities	<ul style="list-style-type: none"> <li>• Continue Silver Line Phase II Preparation.</li> <li>• Fund and implement Metro 2025 programs, including the expansion of eight-car trains.</li> </ul>

**Office of Inspector General**

<i>(Dollars in Thousands)</i>	Actual 2014	Actual 2015	Approved Budget 2016	Proposed Budget 2017	Change	Variance
PERSONNEL COST	\$3,182	\$2,975	\$3,401	\$4,339	\$938	<b>27.6%</b>
NONPERSONNEL COST	\$557	\$656	\$1,223	\$1,054	(\$168)	<b>-13.8%</b>
<b>TOTAL COST</b>	<b>\$3,739</b>	<b>\$3,631</b>	<b>\$4,624</b>	<b>\$5,393</b>	<b>\$769</b>	<b>16.6%</b>
<b>BUDGETED POSITIONS</b>	<b>34</b>	<b>34</b>	<b>34</b>	<b>36</b>	<b>2</b>	<b>5.9%</b>

**Purpose**

The Office of Inspector General (OIG) is an independent office that reports to the Metro Board of Directors. OIG is modeled after the Federal Offices of Inspectors General to advance Metro's accountability and transparency.

**Responsibilities**

The OIG supervises and conducts independent and objective audits, investigations, and reviews of Metro programs and operations to promote economy, efficiency, and effectiveness, as well as to prevent and detect fraud, waste, and abuse in such programs and operations. The Inspector General provides advice to the Board of Directors and General Manager to assist in achieving the highest levels of program and operational performance in Metro.

**FY2017 Business Plan**

- OIG's audit component will conduct risk-based performance audits and evaluations to promote economy, efficiency, and effectiveness of Metro programs, operations, and activities.
- At the request of the Office of Procurement, OIG will perform reviews and analyses of contractor proposals to determine reasonableness of cost/pricing information.
- OIG will also supervise Metro's annual independent audit of financial accounts, conducted by external auditors, to facilitate timely reporting to bondholders.
- OIG's investigations component will provide all oversight and administration of the OIG hotline.
- OIG's investigation component will handle and issue confidential reports of investigations involving fraud, waste, abuse, and gross mismanagement.
- OIG's investigation component oversees and administers Metro's Whistleblower/Retaliation Policy, as well as provides confidential and timely investigative reports to the Whistleblower Panel.
- OIG's investigation component will lead coordination of investigations with outside agencies and/or the MTPD.
- OIG will provide internal controls and fraud awareness training to Metro departments and offices upon request.

**FY2016 Highlights and Major Accomplishments**

- OIG's audit component completed at least six performance audits and made value-added recommendations to promote economy, efficiency, and effectiveness of Metro programs and operations.

- 
- OIG also reviewed at least eight contractor proposals for reasonableness of cost/pricing information and suggested about \$4.5 million in net adjustments to the Office of Procurement for use in contract negotiations. In addition, the office issued at least 20 other attestation reports for billing rate and pre-award reviews.
  - OIG's audit component successfully "passed" an internal quality assurance review to ensure its internal quality control system operated to provide reasonable assurance of compliance with *Government Auditing Standards*.
  - OIG successfully supervised Metro's annual independent audit of financial accounts.
  - OIG updated its audit risk assessment to feed into OIG's (Board approved) Calendar Year 2016 Work Plan.
  - OIG's investigative component handled the review, referral or subsequent investigation of over 400 complaints of the OIG hotline.
  - OIG's investigative component issued at least 15 confidential reports of investigations involving fraud, waste and abuse.
  - OIG's investigative handled at least 10 whistleblower cases providing confidential and timely reports to the Whistleblower Panel.
  - OIG's investigative component continued to coordinate investigations with federal and state agencies and/or the MTPD, when appropriate.
  - OIG provided internal controls and fraud awareness training to Metro departments and offices upon request.

**General Counsel**

<i>(Dollars in Thousands)</i>	Actual 2014	Actual 2015	Approved Budget 2016	Proposed Budget 2017	Change	Variance
PERSONNEL COST	\$4,869	\$4,867	\$6,395	\$7,361	\$966	<b>15.1%</b>
NONPERSONNEL COST	\$7,088	\$2,373	\$1,422	\$2,906	\$1,484	<b>104.4%</b>
<b>TOTAL COST</b>	<b>\$11,957</b>	<b>\$7,240</b>	<b>\$7,818</b>	<b>\$10,267</b>	<b>\$2,450</b>	<b>31.3%</b>
BUDGETED POSITIONS	41	48	48	48	-	0.0%

**Purpose**

The Office of General Counsel (COUN) protects the Authority's legal interests. The General Counsel serves as legal advisor to the Authority in an individual professional capacity. As of January 2015, the Chief Counsel - Human Resources, Governance, and Civil Rights serves as the Ethics Officer for the Board of Directors. As a part of Metro's executive team, the General Counsel serves as a partner in the business process by providing legal and strategic advice for business transactions and policy initiatives. With Section Chiefs leading in key client services areas – including Contracts & Procurement, Customer Service & Regulatory Affairs, Finance & Administration, Governance & Human Resources, Real Estate & Joint Development, Metro Transit Police, Litigation and Workers' Compensation – COUN partners with senior managers to develop agreements with third parties, advise on procurements, assist with real estate and joint development activities, represent the Authority in trials and appeals, and provide advice on risk and representational matters.

**Responsibilities**

The Office of General Counsel is responsible for planning, directing and providing substantially all of the legal services provided to the Authority, and supervising outside counsel when specialized legal expertise is required. Among other things, COUN:

- Provides day-to-day legal advice to Board of Directors, Metro's General Manager, officers, and managers
- Defends Metro in litigation and pursues claims on Metro's behalf
- Interprets Metro's Compact
- Administers Metro's Public Access to Records and Privacy Policy programs
- Counsel Metro's employees on a wide range of general law matters

**FY2017 Business Plan**

- Lead the development of funding agreements for Metro 2025 and lines of credit
- Continue implementation and re-drafting of new procurement policies and procedures
- Continue to work closely with OMBS on updates to the Grants Management Manual and to support any proposed training initiatives
- Continue to work with HR on review and update of WMATA position descriptions and the Personnel Policies and Procedures Manual
- Implement a COUN customer satisfaction survey
- Update governance documents, including the Board Member Code of Ethics, By-laws, and procedures
- Begin training on updated whistleblower policy

- Draft and negotiate legal documents related to the Purple Line and Phase 2 of the Silver Line
- Continue to represent the Authority in litigation and administrative proceedings, including the following major litigation: Challenger, AFDI, Silver Spring Transit Center, Little *et al.*, and the NTSB investigation and cases associated with the L'Enfant Plaza smoke incident

**FY2016 Highlights and Major Accomplishments**

- Policy review and update – COUN provided substantial input and guidance in reviewing, drafting, and updating the following policies: background screening, drug & alcohol testing, procurement, records management, whistleblower, and direct pay, special agreement & settlement authority. COUN is also heavily involved in the HR-sponsored position description and policy re-write initiatives. COUN also assisted in the development of a commodity hedging policy.
- Training – COUN actively participated in the development and implementation of a variety of training initiatives, including EEO, MTPD cadets, whistleblower, GINA, and PARP. COUN also led the initiative to bring training in-house with the company that provides mandatory FTA procurement training. The first of four training sessions was held in November, another is scheduled for December, and the remaining two are planned for 2016.
- Litigation – COUN handles the Authority's litigation, with the exception of those cases which are covered by insurance or that involve areas of law in which in-house attorneys have limited experience. In those instances, COUN has a modest budget for outside counsel.



**Board Secretary**

<i>(Dollars in Thousands)</i>	Actual 2014	Actual 2015	Approved Budget 2016	Proposed Budget 2017	Change	Variance
PERSONNEL COST	\$397	\$504	\$512	\$587	\$75	14.7%
NONPERSONNEL COST	\$134	\$156	\$180	\$219	\$39	21.8%
<b>TOTAL COST</b>	<b>\$531</b>	<b>\$660</b>	<b>\$692</b>	<b>\$807</b>	<b>\$114</b>	<b>16.5%</b>
<b>BUDGETED POSITIONS</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>4</b>	<b>(1)</b>	<b>-20.0%</b>

**Purpose**

The Office of the Board Secretary (SECT) is an independent office that reports to the WMATA Board of Directors. SECT serves as a resource to advance the Board's goals and policies, and Metro's strategic plan.

**Responsibilities**

SECT is responsible for managing the decision-making process, exchange of information and documentation in support of Board activities. The Board Secretary's Office works proactively with the General Manager and his staff to carry out the policies, goals and initiatives of the Metro Board; and serves as liaison between the Board, the agency, and its advisory bodies and riders. Other responsibilities include the coordination, review and distribution of Metro Board materials; recording and maintaining official records of Board actions and resolutions; publishing legal notices and arranging public hearings approved by the Board, as well as providing policy and logistical support for the Riders' Advisory Council.

**FY2017 Business Plan**

- Successful completion of nine Compact public hearings
- Provided support for GM/CEO search
- Facilitated Board member review of FMO responses
- Worked with COUN on revision to Board's Code of Ethics and Board Procedures
- Worked with COUN on revising RAC Bylaws
- Conducted extensive outreach campaign to recruit eight new RAC members
- Provided orientation to new Board member appointments
- Continued support of online public access to Board Resolutions database and Board materials
- Provided joint Committee Coordination for Governance
- Managed the successful conduct of all Board and Committee meetings
- Served as a resource to the Metro Board and staff regarding Board policies and directions

**FY2016 Highlights and Major Accomplishments**

- Continue acting as a vital bridge between executive leadership, the public, and the Board
- Facilitate continued Board efficiency and Governance best practices, including updating the Board Bylaws, Procedures and Code of Ethics in coordination with COUN
- Continue support of and make recommendations regarding Board goals, initiatives and policies
- Ensure Compact requirements are met, including the implementation of the Public Participation Plan
- Coordinate the orientation of new Board members

**Equal Employment Opportunity**

<i>(Dollars in Thousands)</i>	Actual 2014	Actual 2015	Approved Budget 2016	Proposed Budget 2017	Change	Variance
PERSONNEL COST	\$1,291	\$1,190	\$1,277	\$1,733	\$456	<b>35.7%</b>
NONPERSONNEL COST	\$212	\$190	\$397	\$248	(\$149)	<b>-37.5%</b>
<b>TOTAL COST</b>	<b>\$1,503</b>	<b>\$1,380</b>	<b>\$1,674</b>	<b>\$1,981</b>	<b>\$307</b>	<b>18.4%</b>
BUDGETED POSITIONS	-	-	11	12	1	9.1%

**Purpose**

The Office of Equal Employment Opportunity (OEEO) implements and manages WMATA's commitment to the principles of equal employment opportunity, affirmative action, and equal access through the development and promotion of a diverse, inclusive, and discrimination-free work environment.

**Responsibilities**

OEEO has responsibility for key areas including:

- Equal Employment Opportunity;
- Americans with Disabilities Act;
- Workforce Diversity and Compliance;
- Affirmative Action planning and implementation;
- Title VI compliance

**Equal Opportunity Branch**

Equal Opportunity (EO), handles equal employment opportunity (EEO) and dispute resolutions. OEEO is responsible for ensuring adherence to WMATA policy and applicable federal laws regarding non-discrimination in all phases of the employment process through investigating and resolving formal and informal Title VII related complaints using effective, fair, and alternative methods of resolution. The EO Branch provides proactive management consultation/training and employee counseling and partners with HR (Employee Relations Department) in reviewing harassment complaints that may be EO related.

Americans w/Disabilities Act (ADA), responsible for the administration, application, and review of the ADA program as it relates to the receiving, review, and coordination of employee requests for accommodations. An accommodation may take the form of a physical object (desk, chair, etc.) or an actual job change. OEEO works closely with COUN to ensure that all requests for accommodations are handled in accordance with Equal Employment Opportunity policies and practices.

**Workforce Diversity and Compliance Branch**

Workforce diversity and policy compliance is responsible for the design, development, implementation, enforcement, and monitoring of the Affirmative Action Plan in accordance with Federal Transit Administration and Equal Employment Opportunity Commission guidelines and the Office of Federal Contract Compliance Programs.

Workforce diversity interprets and promotes diversity in its broadest sense. As an equal employment employer, WMATA welcomes a broad mix of unique characteristics in its employee population. We believe that our organization must have an inclusion component.

Staff provides tailored training to various departments to ensure diversity awareness. This training is provided to increase the participant's cultural awareness, and to provide an understanding of activities that should be avoided to prevent Civil Rights violations.

During training, emphasis is placed on valuing diversity as a moral value that respects and recognizes the contributions of every human being. Emphasis is also placed on diversity as an economically sound business practice since it enables WMATA to draw on multiplicities of talents and strengths.

### **Affirmative Action Planning & Implementation**

WMATA's affirmative action program's goal is to lessen the number of underutilized job groups by setting targets to change the race/gender profile in the specific job groups where women and minorities are underutilized. This underutilization is identified when we compare our employee population with the mosaic of races, ethnicities, and genders in our labor market.

Working closely with the Talent Acquisition Department (TA), OEEO reviews the applicant pool of potential hires to ensure the pool is representative of specific requirements.

### **Title VI Compliance**

Metro is committed to ensuring that no person is excluded from participation in, or denied the benefits of its transit services on the basis of race, color or national origin, as protected by Title VI of the Civil Rights Act of 1964. Title VI states that, "No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance." Title VI allows persons to file administrative complaints with federal departments and agencies alleging discrimination by financial assistance recipients.

OEEO partnering with various departments ensures that any changes to fares or the availability of transportation is in compliance with Title VI guidelines as they relate to minorities and low income ridership. OEEO also has the responsibility to process and review Title VI administrative complaints.

### **FY2017 Business Plan**

- Build and maintain a premier safety culture and system
- Meet or exceed customer expectations by consistently delivering quality service
- Improve regional mobility and connect communities
- Ensure fiscal stability and invest in our people and assets

### **FY2016 Highlights and Major Accomplishments**

- Partner with BUS for Title VI training for all Bus Operators.
- Comprehensive Diversity & Inclusion Events.
- Expand Community Based Organization (CBO) platform to include the disabled.

**Office of Procurement**

<i>(Dollars in Thousands)</i>	Actual 2014	Actual 2015	Approved Budget 2016	Proposed Budget 2017	Change	Variance
PERSONNEL COST	\$6,519	\$6,302	\$6,859	\$12,091	\$5,232	<b>76.3%</b>
NONPERSONNEL COST	\$1,501	\$1,271	\$1,530	\$1,506	(\$24)	<b>-1.5%</b>
<b>TOTAL COST</b>	<b>\$8,020</b>	<b>\$7,573</b>	<b>\$8,388</b>	<b>\$13,597</b>	<b>\$5,208</b>	<b>62.1%</b>
<b>BUDGETED POSITIONS</b>	-	-	-	89	89	0.0%

**Purpose**

To provide expert, professional acquisition services in support of the transportation service needs of customers across the jurisdictions serviced by WMATA, while maintaining compliance with federal and local agency procurement laws and regulations.

**Responsibilities**

The Chief Procurement Officer has taken the necessary steps to begin the shift in changing the culture regarding acquisition support, and improving the quality of service and responsiveness. There are 89 budgeted FTE resources in PRMT and all are tasked with being a value added partner for success in support of the WMATA mission.

**FY2017 Business Plan**

- Understand and adjust WMATA's procurement operations to ensure alignment with PRMT core values.
- Identify and analyze the critical issues that present challenges and opportunities to improve the Procurement operations.
- Communicate effectively and engage the WMATA community.
  - Build effective communication and engage the community through responsive, open, and honest communications – “tell it like it is”.
  - Foster trust relationships with the PRMT team and our stakeholder customers by delivering timely, accurate information and using mutually beneficial two-way communication.
- Conduct strategic rebalancing & realignment.
  - Realign existing PRMT spaces & faces in a most efficient manner to improve work quality and responsiveness to the customers' procurement needs.
  - Rebalance the PRMT organization using existing PCN spaces.

**FY2016 Highlights & Major Accomplishments**

- Total Procurement Activity (*i.e. Solicitations, Purchase Orders, and Total Award Value*)
  - FY2015: 231 Solicitations; 11,324 POs; and \$984,494,940 Total Award Value
  - FY2014: 149 Solicitations; 10,137 POs; and \$894,184,814 Total Award Value
  - PRMT spearheaded an effort to reduce spending by purchase card holders by reducing the number of cardholders from over 315 to 235 in FY2015
  - In FY2015 PRMT reduced procurement administrative lead time processing from an average of 217 days to an average of 93 days
  - PRMT to roll out CLM functionality to support contracting discipline in FY2016

### Chief of Staff



	Actual 2014	Actual 2015	Approved Budget 2016	Proposed Budget 2017	Change	Variance
<i>(Dollars in Thousands)</i>						
PERSONNEL COST	\$3,163	\$3,104	\$4,101	\$4,767	\$666	16.2%
NONPERSONNEL COST	\$578	\$411	\$615	\$646	\$31	5.1%
<b>TOTAL COST</b>	<b>\$3,741</b>	<b>\$3,514</b>	<b>\$4,716</b>	<b>\$5,413</b>	<b>\$698</b>	<b>14.8%</b>
<b>BUDGETED POSITIONS</b>	<b>32</b>	<b>32</b>	<b>32</b>	<b>31</b>	<b>(1)</b>	<b>-3.1%</b>

#### Purpose

The Office of the Chief of Staff (CHOS) leads major departmental projects and initiatives, directs the agency’s short and long-term strategic planning process, oversees performance in achieving organizational goals and immediate priorities, including the Authority’s Momentum strategic plan, builds and maintains stakeholder relationships, and oversees management’s Board communications. In addition, CHOS serves as Management’s liaison to the Board of Directors and leads the Executive Leadership Team in implementing agency-wide initiatives.

#### Responsibilities

CHOS oversees three offices: Office of Government Relations, Office of Performance, and Office of Planning, in addition to providing administrative support for the General Manager’s office. Responsibilities include: government relations, business plan development and tracking, performance management and reporting, regional and strategic planning, corridor planning and development, policy analysis and development, sustainability, and strategic and Board communications.

Other responsibilities of CHOS include:

- Monitoring and following-up on all requests and directives from the GM/CEO.
- Communicating and coordinating with the Executive Leadership Team (ELT) on Metro-wide policies, initiatives, and projects.
- Coordinating audit reports with all relevant departments.
- Providing communication and coordination on all organizational initiatives and changes.

- Reviewing and approving procurement and personnel actions on behalf of the General Manager.
- Maintaining Metro's Policy/Instruction Manual.
- Reviewing and approving correspondence addressed to the GM/CEO and Board.
- Reviewing responses to Public Access to Records Policy (PARP) requests including serving as the officer for PARP request appeals.
- Serving on the Whistleblower Retaliation Hearing Panel.

**FY2017 Business Plan**

- Build and maintain a premier safety culture and system
- Meet or exceed customer expectations by consistently delivering quality service
- Improve regional mobility and connect communities
- Ensure fiscal stability and invest in our people and assets

**New To FY2017**

- Provide support for Metro's new General Manager and effective leadership changes.
- Continue to co-lead efforts to reach agreement on investment levels for next Capital Funding Agreement.
- Through work with regional elected stakeholders, ensure Federal and jurisdictional funding levels in Maryland, D.C. and Virginia are sufficient for operating and capital needs to address safety and state of good repair priorities, including maintaining \$150 million in annual Passenger Rail Investment and Improvement Act (PRIIA) funding and \$400 million in federal formula funding.
- Keep stakeholders informed of WMATA's progress to reform financial management and improve safety, including implementing FTA Safety Management Inspection (SMI) Corrective Action Plans (CAPs), and recommendations of other oversight organizations.
- Work with community stakeholders and elected officials to inform them and build support for WMATA's priorities for federal Surface Transportation Reauthorization.

**FY2016 Highlights and Major Accomplishments included**

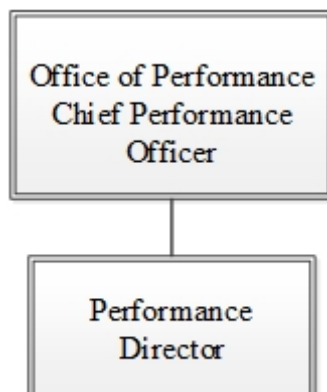
- Maintained communication with key stakeholders about financial reform and safety progress.
- Continued support for Metro2025 funding decision making with business leaders, officials, and community organizations.
- Provided leadership on Authority-wide internal initiatives: Talent Management Council, Employee Engagement Action Plan, Collaborative Risk Management, Facilities Management Board, etc.
- Led the updating or development of Policy Instructions, including those on Fatigue Management, Drug & Alcohol Testing, Capital Program Policy, Sustainability and a series of IT policies.
- Provided on-going support for NTSB L'Enfant Plaza Investigation and follow up through communications of actions to elected leaders, customers, staff, and other stakeholders.
- Led coordination with external stakeholders in support of response and provide assistance in complying with FTA safety rulemakings. This work includes development of policy safety goals in MAP-21.
- Worked with Congressional delegation in support of \$150 million in PRIIA funding and \$400 million in federal formula funding. Legislation included an extension of the PRIIA wireless

---

deadline. Co-led effort resulting in agreement on administrative document needed for next Capital funding agreement.

- Served on the regional Street Smart Pedestrian & Bicycle Safety campaign advisory committee, ensuring bus safety messages are included in the campaign and safety ad placement addresses Metro riding audiences.
- Prepared maps to aid with Metro communications to limited English proficient (LEP) populations.
- Conducted Title VI scan of operating plans to ensure equity in 7000 series fleet assignment and conducted Title VI analysis of NEPP equity impacts.
- Developed a customer-oriented metric for rail system reliability

## Office of Performance



	Actual 2014	Actual 2015	Approved Budget 2016	Proposed Budget 2017	Change	Variance
<i>(Dollars in Thousands)</i>						
PERSONNEL COST	\$1,008	\$873	\$1,230	\$1,314	\$84	<b>6.9%</b>
NONPERSONNEL COST	\$253	\$260	\$539	\$737	\$198	<b>36.6%</b>
<b>TOTAL COST</b>	<b>\$1,260</b>	<b>\$1,133</b>	<b>\$1,769</b>	<b>\$2,051</b>	<b>\$282</b>	<b>15.9%</b>
BUDGETED POSITIONS	7	7	7	8	1	14.3%

### Purpose

The Office of the Chief Performance Officer (CPO) unifies and aligns WMATA around achieving its strategic goals by delivering focus on Key Performance Indicators (KPIs). CPO produces and presents to the Board of Directors the quarterly Vital Signs Report that documents performance trends, describes performance change and outlines future actions to improve performance.

### Responsibilities

CPO works with GM/CEO, executives, senior management and departments to facilitate data-driven decision making. Products and services include:

- Performance reporting (Vital Signs, GM/CEO monthly report)
- Target-setting (KPIs, new MAP-21 measures)
- Industry benchmarking
- GM/CEO and department-level business plan development
- Collaborative risk management (CRM) program development

CPO's collaborative work across the agency to turn data into performance information helps prioritize decision making on actions to improve. Annually, CPO facilitates the GM and ELT through KPI target setting. Targets for each KPI define what success looks like. CPO uses the quarterly Vital Signs Report to carry forward the organization's message about why performance has changed and what actions can be taken to improve.

CPO facilitates the annual departmental business planning process. This work fosters improved organizational alignment toward our strategic goals by cascading performance measures, targets



and management actions down through the organization. The departmental business plans are guided by the annual update of the GM/CEO Business Plan. This is in turn guided by the Board of Director's focus on strategic plans and policy. In addition, CPO facilitates the Executive Team's work to better understand and manage organizational risk, including the identification and potential mitigation of enterprise risks.

### **FY2017 Business Plan**

CPO's business plan includes collecting agency-wide performance data and working with departments to analyze trends, ask questions about why performance changed and gain input/consensus on actions to improve performance. CPO supports the organization with analysis and development of collaborative solutions to business issues, including process improvements. CPO staff network to make connections across offices regarding trends, challenges and potential solutions, drawing management attention to key issues. CPO strives to position WMATA as an industry leader in performance management by working with and convening other transit organizations to benchmark performance and share best practices.

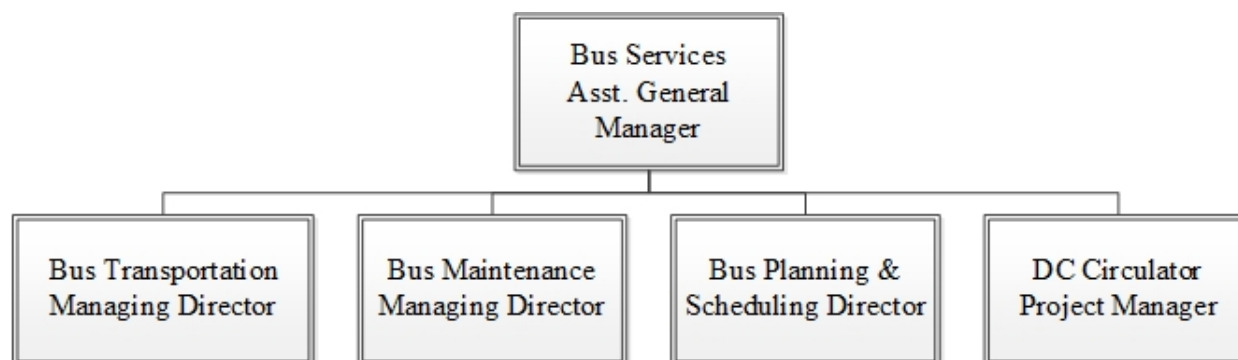
### **New To FY2017**

- Augment Vital Signs with new/improved KPIs such as customer travel time and enhanced graphical displays so that external audiences understand our performance and actions being taken.
- Guide departments to better use data to make decisions, such as through creation/tracking of new measures using Cognos dashboards and other tools.
- Use risk data gathered during year one of the collaborative risk management program to build and mature the program and begin to change the culture.
- Collaborate with Transit Asset Management Office, Planning, Government Relations and other parties to ensure WMATA is compliant with MAP-21 rules.
- Position WMATA as transit industry leader, improve industry benchmarking through co-chairing the new APTA Transit Performance Management subcommittee.

### **FY2016 Highlights and Major Accomplishments**

- Refreshed the Vital Signs Report and added business operations results with measures. Vital Signs received industry recognition as a best practice in communicating information to support data driven decision making [Transportation Research Board (TRB) Special Task Force on Data for Decisions and Performance Measures].
- Completed research and development and created tools to begin reporting on customer travel time. TRB Executive Committee selected CPO/PLAN paper, "Transit Travel Time Reliability: Shifting the Focus from Vehicles to Customers", as the winner of the William W. Millar Award for the best paper in the area of public transportation.
- Continued to improve the business planning process, with improved alignment using common KPIs, collection of business unit risk data, and refreshed look.
- Facilitated enterprise risk discussions with the ELT to engage executives and create a baseline for CRM program development.
- Substantially completed asset data collection using the FTA's Transit Economics Requirements Model (TERM-LITE) in preparation for compliance with MAP-21.
- Solicited industry members and launched new APTA Transit Performance Management subcommittee at APTA 2015 Annual Meeting.

## Department of Bus



<i>(Dollars in Thousands)</i>	Actual 2014	Actual 2015	Approved Budget 2016	Proposed Budget 2017	Change	Variance
PERSONNEL COST	\$395,372	\$412,875	\$427,158	\$396,700	(\$30,458)	-7.1%
NONPERSONNEL COST	\$73,711	\$73,000	\$77,541	\$77,038	(\$503)	-0.6%
<b>TOTAL COST</b>	<b>\$469,082</b>	<b>\$485,875</b>	<b>\$504,699</b>	<b>\$473,738</b>	<b>(\$30,961)</b>	<b>-6.1%</b>
<b>BUDGETED POSITIONS</b>	<b>4,138</b>	<b>4,177</b>	<b>4,183</b>	<b>4,173</b>	<b>(10)</b>	<b>-0.2%</b>

### Purpose

The Department of Bus Services is committed to being an integral part of the Washington metropolitan area by ensuring the safest, cleanest, most reliable, cost effective and responsive bus service, by promoting regional mobility and by contributing to the social, economic and environmental well-being of the community.

### Responsibilities

The Department of Bus Services is responsible for the maintenance, operation, scheduling and planning of Metrobus routes in the District of Columbia, Virginia, and Maryland. This is currently accomplished with approximately 1,548 buses, 299 routes, 175 lines and 4,173 employees. Additionally, Bus Services is responsible for the maintenance of Metro's 1,499 service vehicles and 753 pieces of equipment, and manages the DC Circulator Contract (a reimbursable project). Bus Service is the transportation provider for more than 132 million customers each year.

### FY2017 Business Plan

The Department of Bus Services has a Business Plan for each office: Bus Transportation (BTRA), Bus Maintenance (BMNT), and Bus Planning, Scheduling, and Customer Facilities (BPLN). Each office's Business Plan details how Bus Services day-to-day actions help Metro make progress towards the agency's four Strategic Goals. The actions, corresponding performance targets, and measures in these Business Plans support the General Manager's Priorities and provide actionable and measurable plans that guide Bus Services efforts to continually improve its services and deliver its programs.

Below are examples of specific actions outlined in the Bus Services Business Plans:

- Reduce Employee Injury rate through the use of pro-active safety programs, investigation into all cases of injury and counseling of employees with multiple injuries.
- Minimize customer injuries through continuous training, service adjustments to maintain schedules and working with jurisdictions to improve traffic conditions.
- Continue improvement of the Priority Corridor Network (PCN) corridors and other services, remaining within budget to continue to improve on-time performance (OTP) to reach Metro's goal of 79 percent OTP.
- Be fiscally responsible and maintain operating expenses within budget and continue a high level of expenditure of capital funds to support the overall goals of improving customer service.
- Continue customer communication efforts with bus operators to improve their skills, reduce complaints and minimize assaults.
- Work proactively with Human Resources to fill vacancies to minimize overtime and to ensure that all work elements are done in a timely fashion.

Bus Services Business Plans focus on actions for the provision of safe, efficient and reliable service. The actions and measures in their business plan aim to positively influence the following GM/CEO's Business Plan performance measures:

- Employee Injury Rate
- Customer Injury Rate
- Bus On-Time Performance
- Customer Commendation/Complaint Rate
- Capital Funds Invested
- Operating Expense on Budget
- Number of Positions Filled

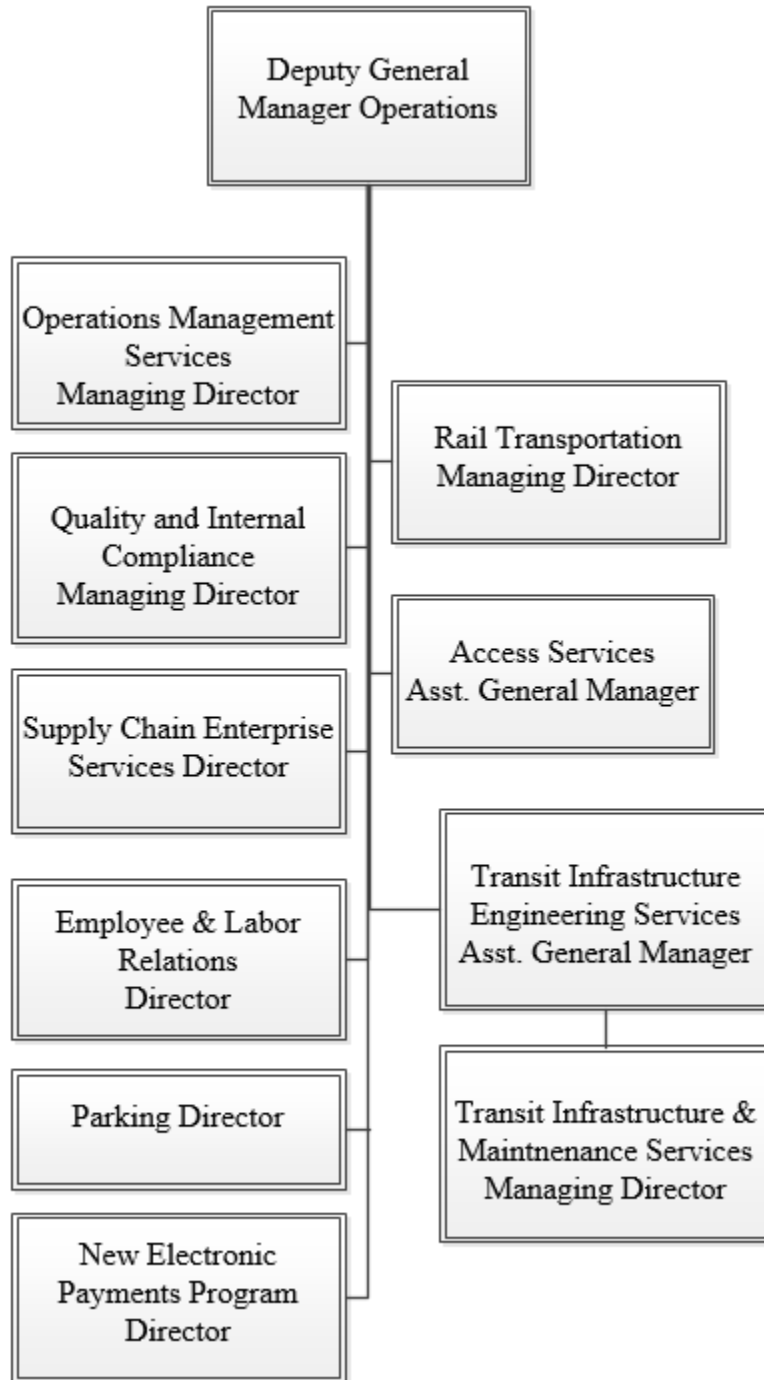
#### **New To FY2017**

- Thirteen (13) FTA – Safety Management Inspection (SMI) Corrective Action Plans (CAPs).
- Manage completion of five year non-revenue vehicle procurement (FY17 - 21) with the delivery of 177 vehicles by the end of FY 2017; which also ensures long-term capital replacement program adherence.
- Implemented the rollout of the new yard management/dispatching function at Bladensburg division to enhance on-time dispatch of revenue fleet. The remaining eight bus divisions to be completed by the end of CY2016.
- Reduce GHG emissions for bus revenue fleet in FY's16/17/18 with tracking based on three measures of intensity against a 2009 baseline, including GHG emissions per vehicle mile; GHG emissions per passenger mile and GHG emissions per revenue hour as measured through CO<sub>2</sub>e displacements.
- Introduce first 40 foot battery powered bus manufactured by new flyer in the summer of CY2016. Pilot program operated out of the western division to evaluate the feasibility of this technology to be used in our operating profile (this is a zero emissions vehicle).

**FY2016 Highlights and Major Accomplishments**

- Metrobus continued its successful State of Good Operations (SOGO) program to better connect communities through enhanced bus service, improving on time performance, reliability, and customer satisfaction, within budgeted resources.
- Metro also added new buses with low floors for better access and hybrid technology
- Bus On-Time Performance improved to over 78 percent in FY2016, and Bus Fleet Reliability, measured by Mean Distance between Failures, has improved to 6,853 in FY 16.
- **Safety** - Two percent (2%) reduction in OSHA reportable injuries, installed an additional 58 Operator barriers bringing us up to 236 in the system. Completed third party Metrobus passenger hazard assessment of bus interior passenger safety features. Third party assessment of Chevrons to reduce rear end collisions. Participated in task group to develop a MOU to implement Metrobus close call program. Developed and awarded a contract to have a third party assessment of fire risk on all new bus fleets. Installed 343 MGM eStroke brake monitors, this monitors brake over stroke and dragging brake conditions.
- **Service Quality** – conducted post-delivery first article inspections for 3 new bus deliveries; 21 60' Hybrid electrics, 164 40' CNG's, and 110 40' Hybrid electrics. Completed 71 midlife overhauls. Introduced and managed in excess of 16 fleet reliability campaigns performed by both internal and external staff. Implement increased contract bus cleaning by performing two major cleanings per month at the intercity bus divisions.
- **Environmental Sustainability** - completed 181 refrigerant conversions (R22 to R407c). Completed installation of 91 electric fan conversions. Contracted with New Flyer for the delivery of one (1) all electric bus.
- **People and Assets** – YTD expended 7,414 hours of technical training for staff, with 2,274 seats filled representing a 69 percent fill rate, and 35 basic curriculums being offered. Management training (Refreshing the Leader Within) 168 of 416 complete.

### Department of Operations



<i>(Dollars in Thousands)</i>	Actual 2014	Actual 2015	Approved Budget 2016	Proposed Budget 2017	Change	Variance
PERSONNEL COST	\$20,633	\$26,089	\$32,102	\$34,005	\$1,904	5.9%
NONPERSONNEL COST	(\$666)	\$2,211	\$3,795	\$90,470	\$86,675	2283.7%
<b>TOTAL COST</b>	<b>\$19,967</b>	<b>\$28,300</b>	<b>\$35,897</b>	<b>\$124,475</b>	<b>\$88,579</b>	<b>246.8%</b>
<b>BUDGETED POSITIONS</b>	<b>154</b>	<b>148</b>	<b>147</b>	<b>232</b>	<b>85</b>	<b>57.8%</b>

**Note:**

The above summary represents the following offices: Operations Mgmt Services, Quality & Internal Compliance, Supply Chain Enterprise Services, Employee & Labor Relations, Parking, and New Electronic Payments Program.

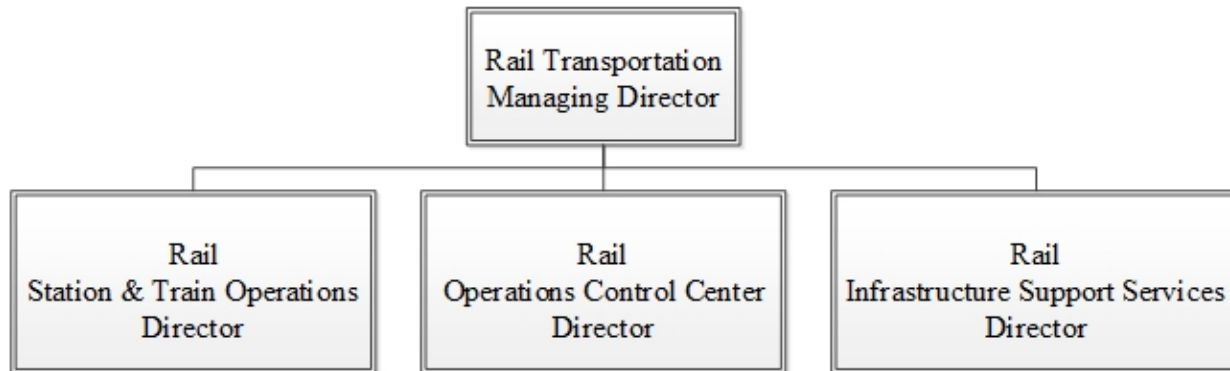
**Purpose**

The Deputy General Manager (DGMO) directs the daily operations and maintenance of the Metrorail system covering 117.5 miles of track, 91 stations, vertical transportation system (618 escalators/315 elevators), 1,100+ railcars, nine rail yards, Metro's supply facility, and all WMATA administrative facilities.

**Responsibilities**

The DGMO manages an annual operating budget that exceeds \$800 million, executes an annual capital budget of \$800 million that is focused on rebuilding Metro to a state of good repair, as well as providing labor relations management, technical skills training and return to work programs for employees.

### Rail Transportation



	Actual 2014	Actual 2015	Approved Budget 2016	Proposed Budget 2017	Change	Variance
<i>(Dollars in Thousands)</i>						
PERSONNEL COST	\$178,769	\$196,868	\$214,977	\$205,280	(\$9,697)	-4.5%
NONPERSONNEL COST	\$1,782	\$1,754	\$1,861	\$2,549	\$688	37.0%
TOTAL COST	\$180,551	\$198,622	\$216,838	\$207,829	(\$9,009)	-4.2%
BUDGETED POSITIONS	1,623	1,663	1,661	1,661	-	0.0%

#### Purpose

The Office of Rail Transportation (RTRA) strives daily to provide our customers with a safe, courteous, and capable transit experience that demonstrates our renewed commitment to the mission of the Authority and to the region's riding public.

#### Responsibilities

The Office of Rail Transportation (RTRA) provides rail service across 117.5 miles of track and 91 stations, 40 of which are in Washington, D.C., 26 in Maryland and 25 in Virginia. The Silver Line Phase II will add 11.4 miles of track and six additional stations in Virginia. RTRA is responsible for all facets of rail operations including station operations (ROSO), train operations (RTTO), rail operations control center (ROCC) including maintenance operations center (MOC), training (ROQT), and planning/scheduling (ROSC).

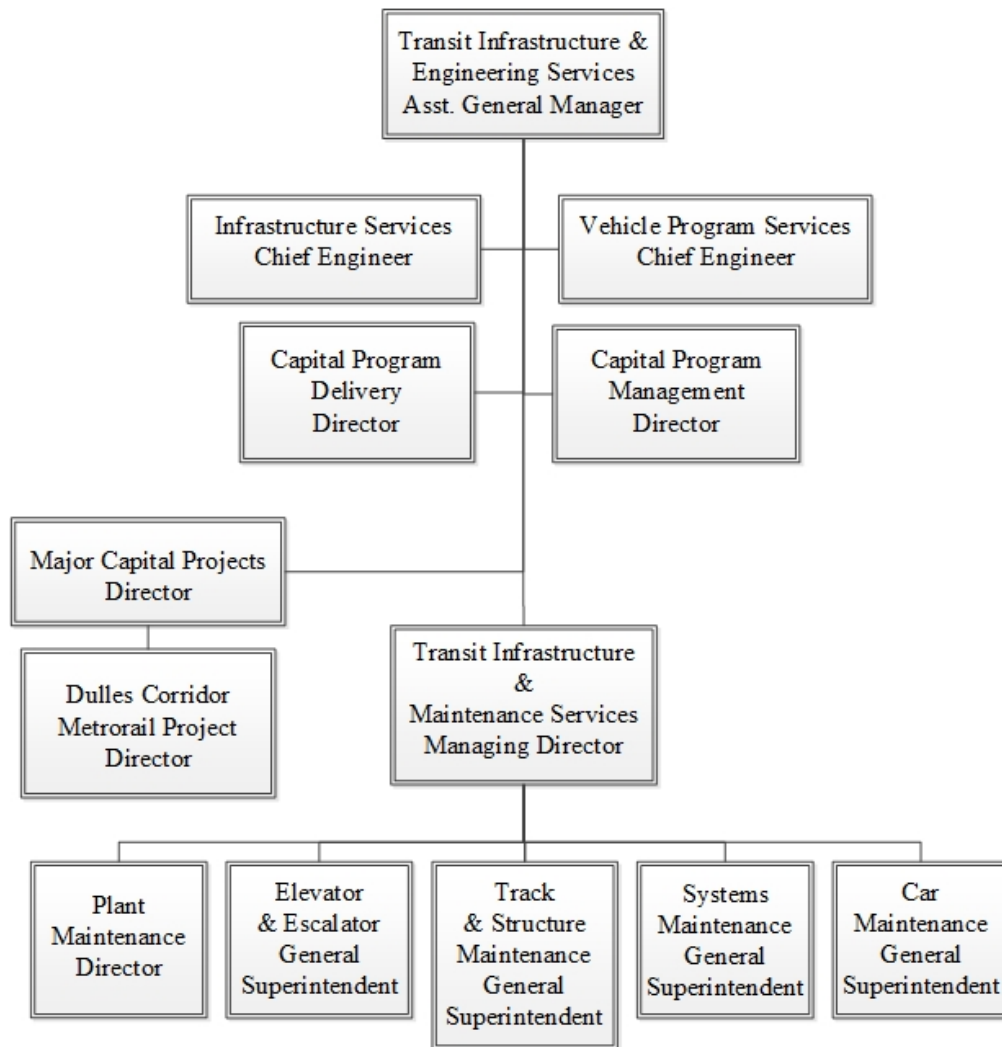
#### FY2017 Business Plan

- Employee Injury Rate - Less than 4.6 injuries per 200,000 work hours
- Customer Injury Rate – Less than 1.8 per million passengers

#### New To FY2017

Six rail training instructor positions and \$700K of services were added to the FY17 budget in support of FTA SMIs R-1-2-a, R 1-12-a, R-2-18-b and R-2-17-c.

### Transit Infrastructure and Engineering



	Actual	Actual	Approved	Proposed		
<i>(Dollars in Thousands)</i>	2014	2015	Budget	Budget	Change	Variance
PERSONNEL COST	\$394,691	\$360,750	\$418,881	\$346,110	(\$72,771)	<b>-17.4%</b>
NONPERSONNEL COST	\$176,701	\$176,039	\$178,839	\$69,575	(\$109,263)	<b>-61.1%</b>
<b>TOTAL COST</b>	<b>\$571,392</b>	<b>\$536,788</b>	<b>\$597,720</b>	<b>\$415,686</b>	<b>(\$182,034)</b>	<b>-30.5%</b>
<b>BUDGETED POSITIONS</b>	<b>4,837</b>	<b>4,921</b>	<b>5,004</b>	<b>5,004</b>	<b>-</b>	<b>0.0%</b>

Note:

The above summary represents the FY2016 reorganization which impacted the DGMO, TIES, LABOR and ACCESS operations.

**Purpose**



The Department of Transportation Infrastructure and Engineering Services (TIES) strives to provide a positive daily commute for our customers by providing a safe and reliable rail system through comprehensive engineering, inspection, maintenance, and rehabilitation programs that enhance the condition of the Metrorail system, Metrobus and Metrorail facilities, shops, rail yards and railcars. TIES is comprised of the following offices:

- Chief Engineer Infrastructure (CENI)
- Chief Engineer Vehicles (CENV)
- Rail Car Maintenance (CMNT)
- Capital Program Delivery (CPDO)
- Capital Program Management Office (CPMO)
- Elevator and Escalator (ELES)
- Intermodal Strategic Planning (IPLN)
- Major Capital Projects (MCAP)
- Plant Maintenance (PLNT)
- Quality Assurance and Warranty (QAAW)
- Systems Maintenance (SMNT)
- Storerooms and Material Logistics (SRML)
- Transit Asset Management (TAMO)
- Track and Structures (TRST)

### **Responsibilities**

- Engineering, project management and construction management for the Capital Program ensuring that the proper capital investments are made to support safe operations of the Metro System
- Leads and coordinates hands-on technical support with the delivery and acceptance of railcars and rail vehicles required for maintenance of the system
- Management of comprehensive maintenance program for a fleet of 1100+ railcars, 266 rolling stock track maintenance vehicles, 955 pieces of support equipment and provides a daily service requirement of 954 railcars
- Maintain a state of good repair on WMATA's vertical transportation system, including 613 escalators (in stations) and 313 elevators (in stations, parking garages and maintenance facilities)
- Manage and maintain all of WMATA's facilities and mechanical equipment systems in support of Metrorail and Metrobus operations that includes 91 Metrorail stations, 24 parking garages, nine rail yards, 10 bus garages and 26 administrative facilities covering a 1,500 square mile area
- Provide independent and objective quality assurance services designed to add value and to improve the organization's operations and procurement
- Enhance the safety and reliability of WMATA operations through comprehensive maintenance programs for Automatic Fare Collection (AFC), Automatic Train Control (ATC), Communications Systems (COMM), Lighting, Low Voltage Systems and the Rail Traction Power Distribution Systems (POWR), Shops and Material Support (SAMS) and support to CPDO for capital rebuilding

- Manage inventories and processes needed to support and maintain all systems and equipment in the Department of Transit Infrastructure & Engineering Services (TIES). TIES operates 11 storerooms with inventory valued at over \$30.0 million
- Inspection, maintenance and rehabilitation of all revenue and yard tracks as well as all aerials, bridges, retaining walls and tunnels
- Replacement of track components such as switches, fasteners, running rail, cross-ties, and insulators on ballast and direct fixation track throughout the Metrorail System
- Maintenance and inspection of WMATA's right-of-way structures, fence lines, parking garages, and provides inspection reports for 432 mainline miles of track, 171 mainline switches, and 354 yard switches

### **FY2017 Business Plan**

The thirteen organizations that comprise the Department of Transit Infrastructure and Engineering have Business Plans that articulate how their day-to-day actions help Metro make progress towards the agency's four strategic goals. These Business plans contain specific actions to implement the GM/CEO's priorities and contribute to the attainment of the agencies Strategic Goals by positively influencing the following measures:

- Employee Injury Rate
- Customer Injury Rate
- Rail On-Time Performance
- Average Persons per Car
- Customer Commendation/Complaint Rate
- ADA Compliance
- Operating Budget Compliance
- Percentage of Employees Certified
- Percentage of Employees Engaged
- Vacancy Rate

### **CY2014 Highlights and Accomplishments**

- CENI - Worked with SMNT Power to purchase and install 50 Multipurpose Relays on existing traction power line-ups. Assembled Request for Proposal packages for both a facilities and a systems General Engineering Consultant Contract. Completed and published communications standard drawings. Developed Corrective Action Plans and submitted documentation to close five NTSB findings related to the L'Enfant Plaza incident. Developed corrective action plans for FTA findings. Submitted documentation to close 4 Internal Safety and Security Audit findings and one ISSA finding closed.
- ELES - Escalator availability for CY2014 was 93.1 percent, the best delivered since 2010. The modernization program improved the overall condition of the fleet and allowed technicians to repair unexpected breakdowns quicker. The mean time to repair broken escalators was just over 5 hours in 2014, compared to over 7.5 hours in 2013. At 96.9 percent, elevator availability for CY2014 was below target by half a percentage point, but was an improvement over 2013. The reorganization of staff into five service regions improved response times while training

improved the ability of technicians to troubleshoot problems and make the necessary repairs. Thirty-seven units were rehabilitated or replaced as part of the modernization program.

- TAMO - Facilitated the development of Transit Asset Management Plans for each asset class within WMATA in line with MAP-21 requirements. These plans create an alignment between the strategic goals of WMATA with decision making during each stage of an assets life-cycle. Developed and tested mobile application for assessing condition of assets as well as documenting maintenance activities. This application will be piloted in 2015. Established guidelines for capital expenditure evaluation, asset condition assessment and asset life-cycle cost.
- CENV - Eight (8) 7000 Series railcars were delivered to WMATA and began design qualification tests. These tests include line clearance tests to make sure that the train fits through our tunnels and that the propulsion, braking and ATC systems meets our performance specifications. At the satisfactory conclusion of these tests, the train was put in simulated revenue service where the train is run in service without passengers.
- PLNT - Achieved a 2.96 employee injury rate, which was better than the target of no more than more than 3.2 injuries per 200,000 work hours; Completed 12 major and 12 mini rehabs to restore the appearance of rail stations; renovated five (5) bus loop restroom/break room facilities; installed 140 emergency response ladders (12' and 16" extension) at all underground rail stations; replaced 156 platform emergency end gates at 39 underground stations and upgraded four tunnel ventilation fan control systems and four drainage pumping station control systems (from pneumatic to PLC and Miltronics).
- TIES AGM - Worked with SMNT Power to purchase and install 50 Multipurpose Relays on existing traction power line-ups. Eight (8) 7000 Series railcars were delivered to WMATA and began design qualification tests. Rail Fleet Reliability reached a 10-year high in 2014 as maintenance efforts enabled the deployment of 5.0 percent more railcars for Silver Line service. Escalator availability for CY2014 was 93.1 percent, the best delivered since 2010, as technicians repaired unexpected breakdowns more quickly than in prior years the modernization program improved the overall condition of the fleet.
- CMNT - Rail Fleet Reliability reached a 10-year high in 2014 as maintenance efforts enabled the deployment of 5.0 percent more railcars for Silver Line service. Maintenance efforts resulted in railcars reliably traveling 20.0 percent more to service Silver Line stops while railcar delays increased only slightly.
- QAAW - Implemented a Quality Assurance Inspection program for TIES. Collaborated with OMBS to establish a Capital Improvement Project (CIP) invoice review program – in response to the FTA's 2014 Financial Management Oversight (FMO) review – ensuring CIP invoices submitted to the FTA for reimbursement include necessary substantiation and documentation for lawful and proper payment. Supported Commissioning and Testing of the Pilot 7000 Series Railcars, and First Article Inspections (FAI) for Sub-Components, Pilot Car, Production Shell and Car.
- TRST - Completed installation of 44 Yard Switches, 15,199 Cross-Ties, 15.7 miles of Running Rail, 28,207 Fasteners, 836 open joints welded, 1,799 ROW Signage Replacement and 51.1

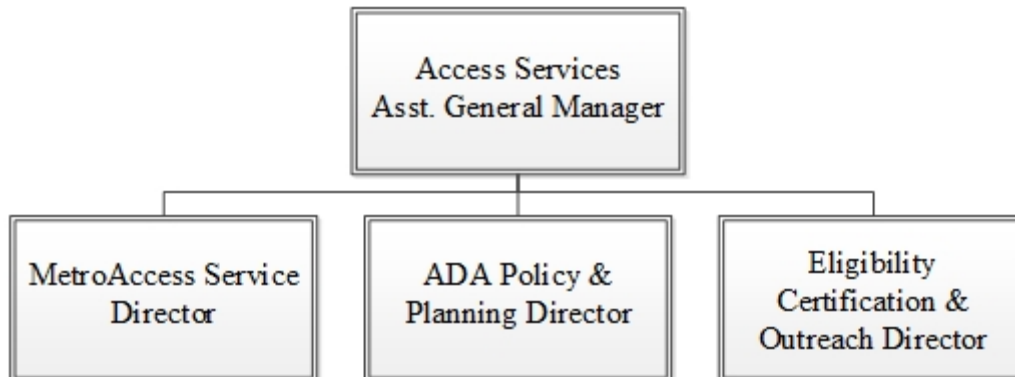
miles of Tamping. Completed rehabilitation of: 650' Floating Slabs, 2,520 Leaks, and 9,340 Grout Pads.

- CPDO - This office was established in September 2014 to better serve the needs of the overall Capital Improvement Projects for Infrastructure Renewal. CPDO is comprised of three different offices: Infrastructure Project Management, Infrastructure Construction Management and Track Access and Support Systems. These offices were developed through combining different departments throughout the Authority such as, the Program Management Office for Chief Engineer Infrastructure Services, Track and Structures Escort Support, Non-Revenue Track Allocations, Mobile Operations, Force Account Automatic Train Control Systems, Force Account/Project Group Power, IT and Plant Maintenance. CPDO supports the overall mission of WMATA to deliver high quality, safe, reliable and efficient transportation options throughout the Washington, D.C. Metro region by delivering Capital Projects within scope, schedule and budget.
- MCAP - Completed construction of the MTPD District II Training Facility, which includes firing range and 152 parking slots. MCAP was also awarded the Design-Build contract for construction of the Southern Avenue Bus Garage replacement (new location: Andrews Federal Center) to Hensel Phelps Construction Company. The new facility will be a fully modern Leadership in Energy and Environmental Design (LEED) Silver facility that can hold 175 buses. This contract also includes design and construction of mid-life overhaul facility, maintenance and service shop for non-revenue vehicles and bus engineering shop.
- OPMS - Return to Work met with and counseled 485 employees related to their excessive absenteeism and successfully monitored them until their attendance became acceptable or until disciplinary action including termination was warranted. Return to Work placed and monitored the status of 264 Transitional Duty participants, in order to assist them in transitioning back in to a full duty working environment. Technical Skills Maintenance Training (TSMT) trained, refreshed and requalified over 6,000 employees in Roadway Worker Protection. TSMT has a total of 39 ELES Apprentices that are currently going through a 4-year training program to become certified WAMTA ELES Journeymen. ELES is incorporating new training techniques and utilizing new equipment to increase the practical experience that each student is receiving in the classroom and on the job. Enhancements in the training program through the use of the new equipment has proven to be an asset to increasing the value of each apprentice in the field. OPMS collaborated with OMBS to provide documentation and business processes that were critical in the Authority wide effort to validate capital labor draw downs in FY2015. OPMS has been working with Internal Compliance and Control to continually audit the Capital Time Sheet process and demonstrate compliance with federal regulations on capital funding.
- SMNT - Completed 111.0 percent of their planned safety conversations, with 5,644.5 hours tallied over the course of 10,013 total conversations for the year. Injuries numbered just 13 in CY2014, nine less than CY2013 resulting in a 36.0 percent decrease. SMNT also ensured a successful launch of the Silver Line by working to make the Automatic Fare Collection, Automatic Train Control, Communications and Power systems safe and reliable for both passengers and employees. In addition, SMNT provided outstanding support for both the

Independence Day and Concert for Valor events. Finally, SMNT/POWR maintained a 2,682,032 Mean Distance Between Delay for CY2014.

- DGMO Admin - The Silver Line opened in July 2014, adding five new stations and providing service to a total of 28 stations. Worked with SMNT Power to purchase and install 50 Multipurpose Relays on existing traction power line-ups. Eight (8) 7000 Series railcars were delivered to WMATA and began design qualification tests. Rail Fleet Reliability reached a 10-year high in 2014 as maintenance efforts enabled the deployment of 5.0 percent more railcars for Silver Line service. Escalator availability for CY2014 was 93.1 percent, the best delivered since 2010, as technicians repaired unexpected breakdowns more quickly than in prior years.
- SCES - Inventory Planning: Reduce no demands/obsolete inventory by \$1.0 million within a 3-month time period (for SMNT). Achieved and maintained a Stock out rate of 4.6 percent, exceeding the Goal of 5.0 percent for all external receiving locations. Processed over 400 new items for the 7K project and supported the storeroom optimization program by reviewing over 6,000 of no demand items.
  - Warehousing and Logistics: Receipted for a total 5,290 line items. Exceeded surplus and obsolete goal by 20.0 percent at \$3.3 million in revenue. Automated surplus and obsolete administration by putting auctions on-line. Achieved a 100 percent next day delivery on available material to Satellite Storerooms.
  - Business and Process: The SCES business systems team implemented several new processes around the new engineering tool, Windchill, workflows for item management were created for each operation department. We began work with all of the operations groups to induct assets, maintain parts for those assets, and built a repository for the technical specs, drawings, and salient characteristics. We then facilitated qualification and data cleanup of over 8,000 parts in 2014.

## Access Services



<i>(Dollars in Thousands)</i>	Actual 2014	Actual 2015	Approved Budget 2016	Proposed Budget 2017	Change	Variance
PERSONNEL COST	\$6,130	\$6,422	\$6,938	\$6,417	(\$521)	-7.5%
NONPERSONNEL COST	\$96,877	\$103,165	\$109,569	\$111,025	\$1,456	1.3%
<b>TOTAL COST</b>	<b>\$103,007</b>	<b>\$109,587</b>	<b>\$116,507</b>	<b>\$117,442</b>	<b>\$935</b>	<b>0.8%</b>
<b>BUDGETED POSITIONS</b>	<b>54</b>	<b>56</b>	<b>56</b>	<b>53</b>	<b>(3)</b>	<b>-5.4%</b>

### Purpose

The Department of Access Services (ACCS) ensures that Metro provides safe, reliable and accessible transit service to people with disabilities and demonstrates leadership in the coordination of regional resources to meet the demand for specialized transportation.

### Responsibilities

Through its three program offices (ADA Policy & Planning, Eligibility Certification & Outreach and MetroAccess Service), ensures the continuous improvement of all Metro's accessible services and facilities. ACCS is responsible for:

- MetroAccess service delivery
- Metro accessibility policy leadership
- Ensure ADA and FTA compliance
- Accessibility planning and design support
- Accessibility Advisory Committee staffing and support
- Customer eligibility determination for MetroAccess and Reduced (half) Fare Program
- Outreach and travel training to provide the most independent travel choices to customers with disabilities

**FY2017 Business Plan**

The ACCS Business Plan is centered on three strategic objectives: (1) all of Metro's services are continuously safe and accessible to our customers with disabilities; (2) MetroAccess paratransit service is delivered efficiently and effectively; and (3) specialized transportation alternatives are fully leveraged to ensure the ongoing sustainability of MetroAccess. The ADA Policy & Planning office works closely with Metro's engineers, planners, bus, rail and communications staffs to ensure that our doors are opened to the greatest number of people with disabilities. Over 16 million customers use our accessible bus and rail services every year. Our Eligibility Certification & Outreach office operates a thorough and compliant paratransit eligibility determination process that contributes to the sustainability of the service by ensuring that only those who need paratransit are determined eligible. Effective marketing provides another choice for customers with disabilities - using the accessible fixed-route system over the paratransit option. The fixed-route option also provides greater travel independence and significantly reduced costs to the customer.

The MetroAccess office manages our paratransit service through a team of contractors. In FY2014, ACCS successfully implemented a new multi-contractor, performance-based business model (with a total value of \$1.0 billion in contracts over a 10-year performance period) comprised of five separate contracts: service delivery (three contractors); call center operations; and quality assurance. Benefits from the new model have already materialized through innovative approaches from our new contractors and improvements in efficiency, but a return of ridership growth requires a regional strategy emphasizing demand management.

MetroAccess is tracked through five GM/CEO Business Plan performance measures, including Customer Incident/Injury Rate, On-Time Performance, Customer Complaint Rate, Operating Expense on Budget, and Capital Funds Invested.

**New To FY2017**

Acting on a study of MetroAccess long-term sustainability, which included a demand projection through 2025, ACCS is developing and implementing long term policy and operational strategies and systems that support decreased use of, and more efficient delivery of paratransit services; and increased use of paratransit alternatives. As part of this effort, ACCS is advancing its development of a region-wide system of coordinated paratransit alternatives via partnerships with other entities that can perform specialized transportation service to substitute or supplement MetroAccess.

ACCS is planning technological advancements to include a smart phone application, real time traffic map information and enhanced radio communications between the dispatchers and operators.

We will also work to reduce ACCS operating expenses by identifying segments of MetroAccess demand and utilize non-ADA service, either contracted or funded directly by Metro, to provide the requested service.

ACCS is pursuing more non-ADA paratransit alternatives, such as vehicle transfers to human service agencies that enable them to operate their own paratransit services, saving money for Metro and jurisdictions and providing better service to customers.

---

ACCS will continue to prioritize and implement accessibility improvements to bus stops throughout the region.

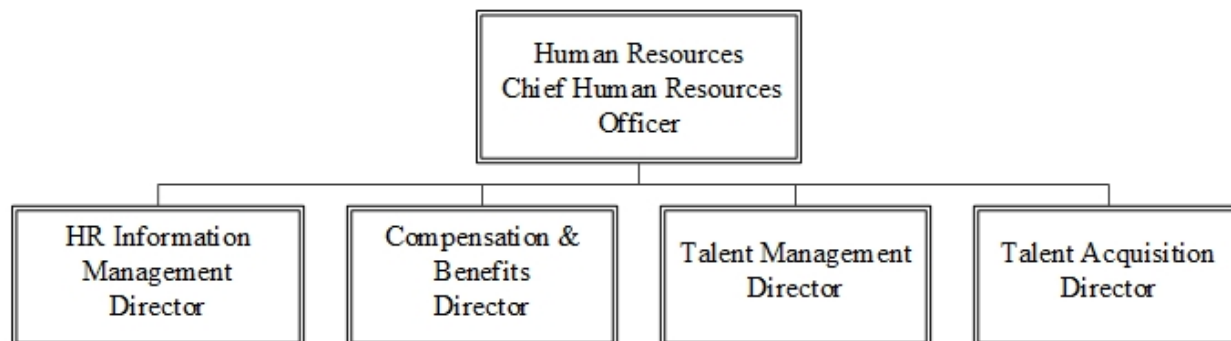
**FY2016 Highlights and Major Accomplishments**

Service under the pilot program with the State of Maryland, known as “Coordinated Alternative to Paratransit Services”, (CAPS) was extended until February 2016. The District of Columbia taxi alternative program, known as “TransportDC” has expanded rapidly. Efforts to add additional pilot programs are underway.

MetroAccess completed a major upgrade of the paratransit scheduling software. This upgrade, the most comprehensive since 2009, involved all aspects of trip reservations, scheduling, routing, and dispatch. Also included was an upgrade of the customer feedback system. Server infrastructure was also upgraded to a more robust design that includes better data security and failover capability.



### Human Resources



	Actual 2014	Actual 2015	Approved Budget 2016	Proposed Budget 2017	Change	Variance
<i>(Dollars in Thousands)</i>						
PERSONNEL COST	\$11,116	\$11,946	\$14,302	\$15,301	\$999	7.0%
NONPERSONNEL COST	\$5,676	\$6,222	\$5,559	\$11,838	\$6,279	112.9%
<b>TOTAL COST</b>	<b>\$16,792</b>	<b>\$18,167</b>	<b>\$19,861</b>	<b>\$27,139</b>	<b>\$7,278</b>	<b>36.6%</b>
<b>BUDGETED POSITIONS</b>	<b>140</b>	<b>141</b>	<b>143</b>	<b>138</b>	<b>(5)</b>	<b>-3.5%</b>

**Purpose**

The Department of Human Resources (HR) is comprised of the Offices of Talent Acquisition, Talent Management, Compensation/Benefits, Information Management, Employee Relations and Project Management. HR develops and sustains programs, policies, and strategies that enhance organizational effectiveness and maximize the potential of the organization and employees to advance the mission and goals of Metro.

**Responsibilities**

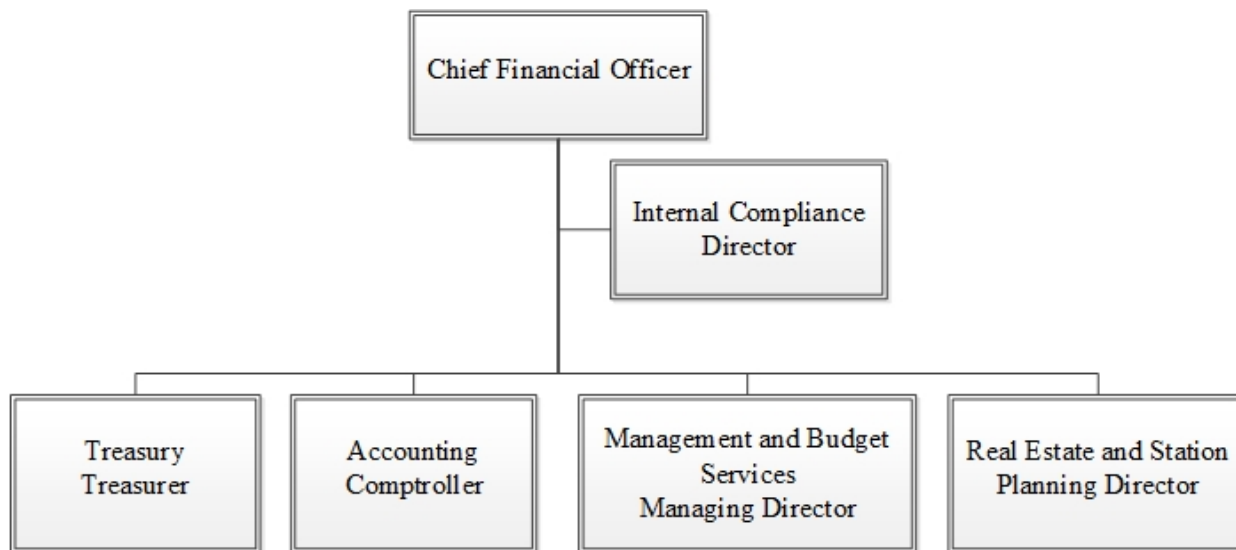
- **Talent Acquisition** designs and implements proactive sourcing and recruitment strategies in support of Metro’s workforce requirements, enabling a stable vacancy rate and deploying multicultural outreach strategies in support of Metro’s Affirmative Action Plan.
- **Talent Management** establishes strategic training and development programs that are linked to career goals and identifies high-performing employees. Talent Management promotes a performance-based culture to motivate and retain employees and builds bench strength through succession planning and leadership development programs.
- **Compensation and Benefits** designs and implements compensation and benefits programs that promote external competitiveness and internal equity. The Employee Wellness Program develops strategies to target and communicate the most common health risk issues and offer programs to assist employees control and/or eliminate risks through awareness and counseling.
- **Information Management** administers and manages PeopleSoft 9.1 data, systems, reporting and personnel transaction processing.
- **Employee Relations** improves employee retention and employee/management relationships through proactive consultation and resolution strategies for workplace issues.

- **HR Project Management** designs and implements strategic human capital programs that align to Metro's strategic goals.

**Program Highlights CY2015 Accomplishments/Initiatives:**

- Conducted the 2014 Employee Survey with 8,177 responses, or 68 percent of the workforce
- Expanded training and career management opportunities
- Established over 80 courses aligned to six tracks
- New course catalog for professional development
- Increased training participation by 54 percent
- Restructured New Employee Orientation to include additional briefings
- Created and implemented the Years of Service Program
- Designed and currently piloting MetroLead, Metro's leadership development program
- Designed and currently piloting Metro's Succession Planning Program
- Created and initiated workforce planning pilots across two departments
- Filled 1642 positions and maintained a 6.1 percent vacancy rate
- Reengineered Bus Operator sourcing model, improved the hire to qualified applicant ratio to 1:38 to 1:10
- Awarded Military Friendly Employer designation for the second consecutive year
- Expanded proactive sourcing strategies to individuals with disabilities
- Launched an intranet-based manager's tool box to provide managers recruitment and hiring job aids
- Updated salary range structures across the organization
- Implemented 2015 Wellness strategy
- Implemented Medicare-eligible retiree prescription drug program
- Enhancement of fitness for duty processes and decreased re-onboarding time to one day
- Launched job analysis and competency architecture project to update job descriptions across the organization and serve as the common foundation for many of our human capital initiatives
- Establishment of HR governance model for PeopleSoft 6.1 enhancements
- Policy revisions include Compensatory Time, Separation from Employment, Excess Hours Worked, Background Screenings, Drug-Free Workplace, Drug and Alcohol Policy and Testing Program
- Designed and deployed workplace bullying awareness training
- Developed an exit interview process for voluntary separations

### Financial Operations



	Actual 2014	Actual 2015	Approved Budget 2016	Proposed Budget 2017	Change	Variance
<i>(Dollars in Thousands)</i>						
PERSONNEL COST	\$43,225	\$48,746	\$48,246	\$54,103	\$5,857	12.1%
NONPERSONNEL COST	\$47,160	\$47,281	\$48,843	\$63,909	\$15,066	30.8%
<b>TOTAL COST</b>	<b>\$90,385</b>	<b>\$96,027</b>	<b>\$97,089</b>	<b>\$118,012</b>	<b>\$20,923</b>	<b>21.5%</b>
<b>BUDGETED POSITIONS</b>	<b>361</b>	<b>371</b>	<b>367</b>	<b>275</b>	<b>(92)</b>	<b>-25.1%</b>

**Purpose**

The purpose of Financial Operations is to facilitate the planning, coordination, management, and implementation of Metro’s services, programs, and priorities while monitoring, sustaining and strengthening the Authority’s fiscal integrity and financial condition.

**Responsibilities**

**Office of Internal Control and Compliance (OICC)**

- The Office of Internal Control and Compliance is responsible for conducting assessments and reviews to monitor organizational wide adherence to financial management controls and related policies and procedures, with a primary focus on compliance with applicable federal regulations necessary to preserve federal grant eligibility. OICC is also responsible for the overall management of the portfolio of financial management related risks across WMATA. OICC provides internal control guidance and training, and partners with departments to review and evaluate business processes efficiency and effectiveness.

**Accounting (ACCT)**

- The General Ledger office analyzes, reconciles, maintains, journalizes and reports accounts receivable, jurisdiction subsidy, inventory, prepaid assets, health and welfare contributions, pension contributions, workers compensation, retirement accounts, cash accounts, investments, debts, operating revenue and expense reports for the National Transit Database, other financial transactions and specific footnotes to the financial statements
- The Accounts Payable office ensures that all payments to vendors, third parties, jurisdictions and reimbursements to employees are processed timely, accurately, efficiently and in compliance with the Authority, Jurisdictional and Federal policies and regulations
- The Financial Analysis office analyzes and evaluates costs charged to capital, reimbursable and new service projects, reconcile funds control in project costing to general ledger and to provide financial reports to Federal, State and Local Jurisdictions in accordance with general accepted accounting principles. Coordinates reporting to the National Transit Database, and is responsible for the preparation of the quarterly financial statements including the Statement of Net Position, Statement of Revenues, Expenses, and Changes in Net Position, and Statement of Cash Flow. Coordinates WMATA audits, and is responsible for the preparation of the Schedule of Expenditures of Federal Awards (SEFA)
- The Financial Systems and Reporting (FSnR) office performs validation of transactions, bundle/upgrade testing, system configuration and maintenance updates. FSnR maintains the monthly allocation process and provides financial/budget variance reporting for the Office of Accounting and its external customers. FSnR also provides direct support for PeopleSoft external interfaces affecting the modules supported by the office, coordinates equipment and software requests for the office and provides Intranet support and server maintenance
- Project Costing provides functional support by leveraging the knowledge of financial and reporting systems, transaction flows, cross-system impacts in order to ensure data integrity. Performs on-going review for quality assurance to ensure that financial information is accurately reported and conveyed in the PeopleSoft Financial Systems
- The Asset Management office provides overall management responsibilities, policies and procedures governing the accountability and control of WMATA's nonexpendable personal property which meets WMAT's current capitalization criteria.

**Office of Management and Budget Services (OMBS)**

- Supports the implementation of Metro's Strategic Plan by aligning resources with actions and strategies to deliver the Mission and Goals of the Strategic Plan
- Plans, coordinates, develops, executes, monitors, and advocates for Metro's multi-year budget and six-year CIP
- Provides accurate and timely information, analysis, reports and makes recommendations to the organization, the GM/CEO, the Board of Directors, and funding agencies
- Provides the organization with the analytical tools to facilitate optimal management, performance and delivery of Metro's Operating and Capital budgets, services, and programs
- Ensures compliance with all federal grant regulations
- Provides long-range financial forecasting and revenue projections

**Treasury (TRES)**

- Manages the fare media sales and distribution functions to provide for an effective and optimal process and organizational structure
- Collects and processes revenues in an efficient and cost effective manner

- Implements fare media (SmartTrip) related technology projects to decrease costs, improve productivity and increase customer satisfaction
- Reduces financial and market risk - liquidity (cash flow) risk, credit risk, workers compensation and third party claims and price fluctuations (fuel, power, materials and supplies)
- Obtains the lowest cost of financing possible, with least restrictive covenants
- Manages investments with the goal of earning a market-rate of return while preserving capital and liquidity

### **Real Estate and Station Area Planning (LAND)**

- Implements Metro's joint development program through which property interests owned and/or controlled by Metro are marketed to private developers with the objective of developing transit-oriented projects that enhance station access and generate revenues for the Authority.
- Develops planning studies focused on access and capacity improvements and concept plans for development on land around Metro stations.
- Oversees the performance of joint development projects to ensure that projects achieve Metro's expected financial objectives
- Manages Metro's surplus property assets
- Negotiates and manages Metro's leasing of property to others, and the leasing of property for Metro use
- Acquires property for Metro operational requirements

### **FY2017 Business Plan**

Financial Operations Business Plans identify the offices day-to-day functions that assist Metro in achieving its four Strategic Goals. Financial Operations' contributions toward agency goals are tracked in the following performance measures in the GM/CEO Business Plan:

- Employee Injury Rate
- Customer Injury Rate
- Customer Commendation/Complaint Rate
- Operating Expense on Budget
- Capital Funds Invested
- Number of Positions Filled

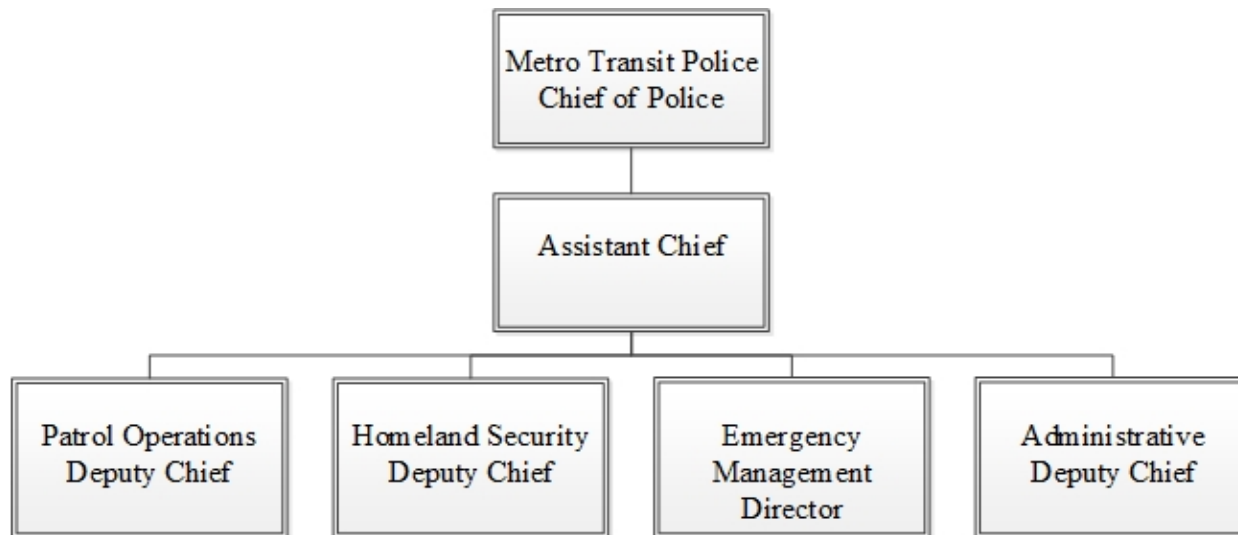
### **New to FY2017**

- Initiate predevelopment planning on future Joint Development projects (TBD)
- Issue 3 new Joint Development Solicitations (West Hyattsville, Forest Glen, Largo)
- Develop work-out approaches for projects stalled or require renegotiation (White Flint, Twinbrook, Silver Spring)
- Complete Joint Development Agreements (Brookland, Navy Yard, College Park, Fort Totten, Grosvenor, and Capital Heights)
- Dispositions of excess property (Royal Street, Stone Straw, Ames, Glenmont)
- Expand non-rider revenues – telecommunication & retail
- Execute continual business process improvements. Update Joint Development policies and guidelines; update Station Access Planning manual; develop policies on parking reductions; develop concepts for alternative/lower cost parking replacement
- Develop implementation strategies for WMATA bus facility plans (Western, Armed Services)

**FY2016 Highlights & Major Accomplishments**

- Financial Operations provided project executive leadership in coordinating WMATA management's responses to the draft Federal Transit Authority's (FTA) Financial Management Oversight (FMO) Review draft report.
- All corrective actions detailed in the FMO management responses were accepted without revision.
- Established WMATA's Office of Internal Compliance in FY2015
- All FMO Testing and Validation Plan deliverables were reviewed and submitted on time
- Developed an authority wide policy for financial management risks and controls
- Completed audit readiness reviews in advance of FTA's Testing and Validation plan
- Initiated effort to adopt the COSO Framework for financial management controls and a comprehensive assessment of financial management related risks.
- Trained 517 staff engaged in grants related activities on Allowable Costs Requirements and Internal Controls
- FY2014 and FY2015 PeopleSoft project costing sub-system reconciliation report in progress
- FY2014 and FY2015 Processing the intake of Silver Line transferred assets budgeted at \$2.9 billion
- In FY2016 WMATA was awarded \$663 million in Federal Grants
- In FY2016 WMATA has successfully received \$194 million federal grant reimbursements
- Maintained a cumulative success rate of 98.0 percent for federal grant reimbursement requests
- Hedged 75.0 percent of budgeted diesel fuel consumption for FY2016 at \$1.97/gallon
- Issued two new Joint Development solicitations (Fort Totten and College Park)
- Executed Term sheets for Joint Development projects (Brookland, Navy Yard chiller site, Grosvenor, Capitol Heights).
- Executed a Joint Development Agreement at New Carrollton
- Closed on Capitol Heights/Davey Street outparcel
- Initiated implementation and formulation of automated budget books

### Metro Transit Police



	Actual 2014	Actual 2015	Approved Budget 2016	Proposed Budget 2017	Change	Variance
<i>(Dollars in Thousands)</i>						
PERSONNEL COST	\$70,375	\$68,417	\$78,093	\$73,341	(\$4,752)	-6.1%
NONPERSONNEL COST	\$2,887	\$2,835	\$4,121	\$7,176	\$3,055	74.1%
<b>TOTAL COST</b>	<b>\$73,262</b>	<b>\$71,252</b>	<b>\$82,213</b>	<b>\$80,517</b>	<b>(\$1,697)</b>	<b>-2.1%</b>
BUDGETED POSITIONS	750	745	729	726	(3)	-0.4%

**Purpose**

The Metro Transit Police Department (MTPD) provides protection for Metro customers, personnel, transit facilities and revenue.

**Responsibilities**

The Metro Transit Police Department is responsible for the protection of customers, personnel, and transit facilities of the 1,500 square mile Transit Zone, comprised of the Commonwealth of Virginia, District of Columbia, and the State of Maryland. The Department is composed of both uniformed and plainclothes officers charged with the duty of enforcing the laws of the signatories, the laws, ordinances and regulations of the political subdivisions, and the rules and regulations of Metro. There are more than 160 civilian Special Police Officers who are responsible for the physical security at rail yards, bus divisions, and other Metro properties. The Office of Emergency Management (OEM) civilian personnel plan, train, and provide on-scene assistance for both natural and man-made emergencies. They are also responsible for digital video management and police radio communications. Other civilian employees are responsible for crime analysis, records management, and various administrative support functions.

**FY2017 Business Plan**

The Metro Transit Police Department Business Plan identifies how MTPD's long range plans and day-to-day actions help Metro make progress towards the its four strategic goals. MTPD's contribution towards agency goals is tracked through the GM/CEO Business Plan.

MTPD Performance measures:

- Employee Injury Rate
- Number of Part I Crimes
- Number of Attendees for Emergency Management Training
- Number of MTPD Customer Complaints recorded in the Early Warning System
- Average Response Time to Calls for Service
- Operating Expense on Budget
- Number of Positions Filled

### **New To FY2017**

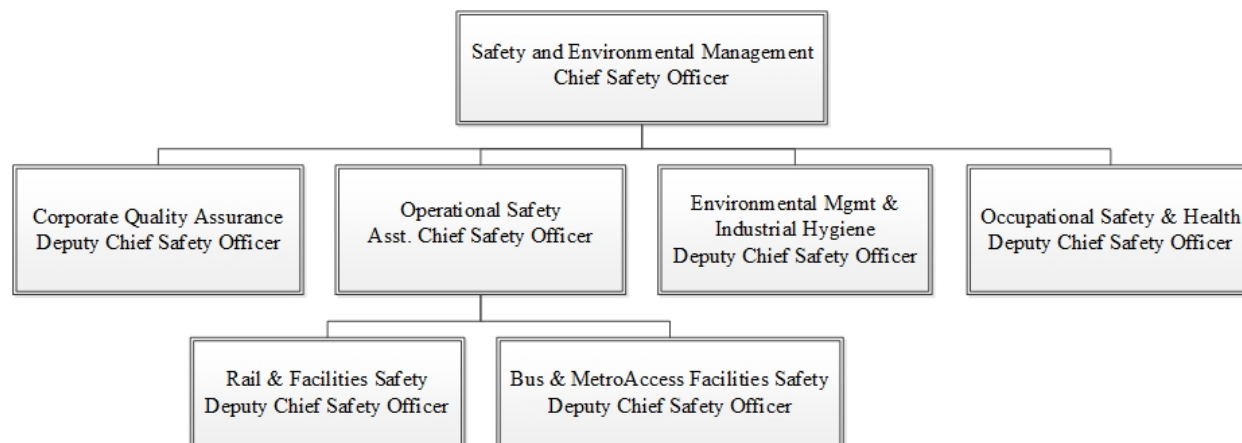
The FY2017 budget includes additional Fire Life Safety positions in response to the Federal Transit Administration (FTA) Safety Management Inspection (SMI). These positions will enhance the Office of Emergency Management support for regional first responders and for regional first responder training. This budget restores all Transit Police reduced from FY2016. The restoration of these sworn officers will have no negative impact in FY2017 as the contract to outsource revenue protection was awarded at a cost that was lower than anticipated. Other initiatives contained in this budget are for a special Transit Police detail to reduce fare evasion and a civilian instructor for MTPD training facility.

### **FY2016 Highlights and Major Accomplishments**

MTPD reports that the number of Part I Crimes are trending towards 1900 or less, a key performance measure for the 2015 Departmental Business Plan. MTPD continues to develop relationships with local district commanders to patrol hot spot areas; to caution all to be aware of their surroundings; to use "Be on the Look Out" (BOLO) messaging. New initiatives accomplished are aimed at reducing fare evasion and bus operator assaults. These initiatives combine dedicated contingents of uniformed police officers and additional CCTV surveillance technology on certain bus routes to enforce fare collection. Also, MTPD is collaborating with CSCM in advance of the holiday season to craft safety messages through a variety of media outlets to help prevent crimes as Metro is a preferred mode of transportation to many popular shopping venues. Lastly MTPD has worked to control costs by awarding four competitive contracts to outsource civilian functions. All of these contracts are valid for over multiple fiscal years and for values of \$1.0 million or more.



## Department of Safety & Environmental Management



	Actual	Actual	Approved	Proposed		
<i>(Dollars in Thousands)</i>	2014	2015	Budget	Budget	Change	Variance
			2016	2017		
PERSONNEL COST	\$6,818	\$7,050	\$7,828	\$9,459	\$1,631	<b>20.8%</b>
NONPERSONNEL COST	\$2,683	\$4,908	\$7,578	\$6,585	(\$994)	<b>-13.1%</b>
<b>TOTAL COST</b>	<b>\$9,501</b>	<b>\$11,957</b>	<b>\$15,407</b>	<b>\$16,044</b>	<b>\$637</b>	<b>4.1%</b>
<b>BUDGETED POSITIONS</b>	<b>61</b>	<b>66</b>	<b>67</b>	<b>66</b>	<b>(1)</b>	<b>-1.5%</b>

### Purpose

The purpose of the Safety & Environmental Management Department (SAFE) is to ensure that Metro’s Bus, Rail, and Access systems and other facilities are operationally safe and environmentally sound for all our employees, customers and surrounding communities. The overall goal is always zero accidents, injuries and fatalities. In striving to accomplish that goal, SAFE in collaboration with all other departments is promoting a corporate safety culture involving all levels, from the Board of Directors to every employee regardless of position or location.

### Responsibilities

Overall SAFE responsibilities include the management and/or compliance of: policies and procedures in the areas of system safety, occupational safety and health, accident and incident investigation, the continuous hazard management process, internal safety audit process, oversight of construction safety, safety and security certification, environmental management, safety data and analysis, industrial hygiene, safety training, corporate safety programs, and corporate quality assurance.

### Business Plan

The Department of Safety and Environmental Management Business Plan identifies how SAFE’s day-to-day actions help Metro make progress towards the agency’s four strategic goals. SAFE’s contribution towards agency goals is tracked through the following GM/CEO Business Plan performance measures:

- 
- Employee Injury Rate
  - Customer Injury Rate
  - Operating Expense on Budget

#### Current Three major/Key Initiatives

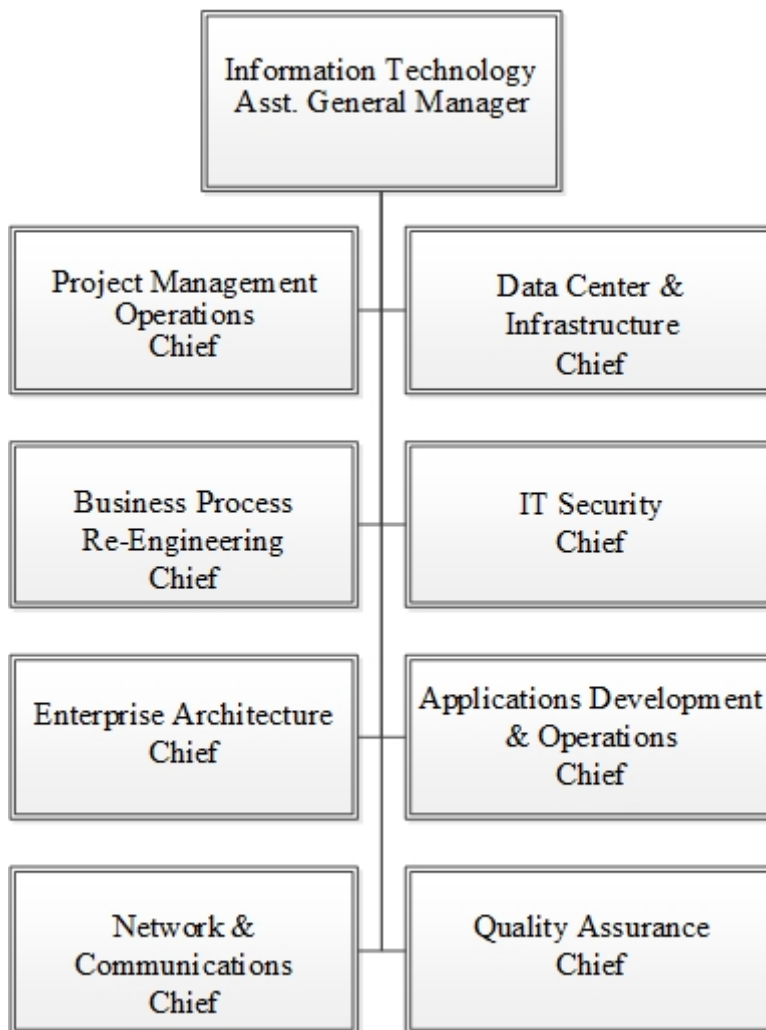
- Transition from TOC to FTA Oversight
- Documenting and closure of open Corrective Action Plans (CAPs)/Accident Reports
- Ongoing implementation of FTA safety management system (MAP21) to improve and strengthen Metro's safety culture.

#### Top Three Major/Key Issues

- Customer and employees safety/culture
- Transition of oversight from TOC to FTA
- Rehabilitation/State of good repair of system

All three are intertwined and affecting all levels of the agency. Continuous positive improvement in the safety of the public and employees as well as the overall public perception of Metro safety is not only one of employees working safely; following procedures and processes but also the unremitting commitment to rehabilitating an aging system (and then maintaining a state of good repair). In addition, the recent change from TOC oversight to FTA oversight is an ongoing transition with many unknowns.

### Information Technology



	Actual 2014	Actual 2015	Approved Budget 2016	Proposed Budget 2017	Change	Variance
<i>(Dollars in Thousands)</i>						
PERSONNEL COST	\$31,807	\$35,848	\$36,059	\$46,789	\$10,730	<b>29.8%</b>
NONPERSONNEL COST	\$22,594	\$24,696	\$30,911	\$31,477	\$566	<b>1.8%</b>
<b>TOTAL COST</b>	<b>\$54,401</b>	<b>\$60,544</b>	<b>\$66,970</b>	<b>\$78,266</b>	<b>\$11,296</b>	<b>16.9%</b>
<b>BUDGETED POSITIONS</b>	<b>322</b>	<b>357</b>	<b>351</b>	<b>325</b>	<b>(26)</b>	<b>-7.4%</b>

**Purpose**

The Department of Information Technology’s mission is to develop, implement and sustain information technology services and communications systems in support of WMATA Operations and WMATA Strategic Goals.

**Responsibilities**

The Department of Information Technology (IT) develops, implements and provides information technology and telecommunication services in support of WMATA's business objectives and strategic goals. IT implements and supports information management solutions throughout WMATA; promotes compatibility, integration and interoperability; and develops and enforces information technology policy and standards throughout the authority.

**FY2017 Business Plan**

The Department of Information Technology Business Plan identifies how IT's day-to-day actions help Metro make progress towards the agency's strategic goals. IT's contribution towards agency goals is reflected in all performance measures in the GM/CEO Business Plan.

**New To FY2017****Rail Operations Implementation**

This project focuses on business process improvement in rail service planning, scheduling, and daily operations of Metrorail service delivery. The expanding Metrorail system and complex track maintenance work require a comprehensive transit scheduling application. Such an application would provide an effective scheduling tool and be a cost-effective solution to meet the ever-increasing challenges in scheduling and operations. In particular, the current scheduling and operations practice could not keep up with the limited supply, the increasing demand, the aging infrastructure, and the commitment of providing reliable and safe service to our customers. Optimized and effective usage of the limited resources will be core to solving these challenges.

Planned for Phase II:

- Stand-up Production environment
- Perform User Acceptance Testing for all major functions related to Daily Crew, EPM (e.g., discipline), Self-Service, and Analytics

**Timekeeping Automation**

As a result of the FTA FMO audit, WMATA is updating processes, policies, and systems to better comply with FTA Grant regulations. In order to meet the regulations, WMATA is revising timekeeping policy and implementing automation to properly capture time, provide auditability to its accuracy, and ultimately properly bill the FTA for labor hours expended on grants.

Additionally, the automation is expected to provide benefits tangentially related to timekeeping including:

- Accurate assignment of overtime consistent with the CBAs
- Quarterly, semi-annual and annual picks compliant with the CBAs
- Scheduling with enhanced flexibility to meet ongoing and ad-hoc operational needs
- Absence Management compliant with WMATA policies and the CBAs

**End to End Asset Management Pilot**

This pilot will demonstrate the ability to integrate near real time remote monitoring data with asset configuration and maintenance information, allowing more work to be performed on a preventative rather than a corrective basis.

**WMATA.COM Redesign Implementation**

FY2017 objectives include ongoing enhancement to the public web portal, including exploration of possible website “personalization” for saving personal itineraries and preferences. Emphasis will continue to be placed on mobile platforms with development of mobile tools and apps, such as push notification for alerts. The intranet team will prepare to migrate our internal website, Metroweb, to a new version of SharePoint with a possible move to a cloud environment.

**Regional Bus Stop Program**

In FY2017, the program plans to enhance the database and applications and establish the processes to ensure that the data is kept current and accurate. With more accessibility information available to the public and with accessible stops increasing over time, the number of MetroAccess rides will decrease resulting in cost savings for WMATA.

**Bus Data Warehouse**

In FY2017, additional data marts will be developed to integrate vehicle maintenance, incidents and customer complaint data to provide additional business intelligence.

**Bus Mobile Apps**

In FY2017, additional RideChecker applications will be developed including the stationary RideChecker where the passenger ridership data is collected from a particular stop or bus bay, recording for each bus at that location.

**Network and Communications**

The FY2017 – FY2021 deliverables will include the completion of the of the Rail Station network Router upgrade program, an upgrade of the administrative facility network routers, completion of the Rail Station Wireless program; implementation of a Supervisory Control And Data Acquisition network using both wired and wireless technology for both BUS and Rail; replacement of end-of-life network components; technology adaptations, decommission old data networks and infrastructure; and the upgrade of the end-of-line network equipment and infrastructure.

**Quality Management System (QMS)**

Building on FY2016 implementation of the IT Quality Management System (QMS) and initial ISO 9001:2008 certification, IT-QA will be expanding the certification scope to include all IT Department’s business processes associated with its catalog of services and products. IT-QA will also continue working to develop and implement Capability Maturity Model Integration (CMMI) Level 2 for IT.

**Standardizing Systems Development Life-Cycle (SDLC) for IT**

As part of IT’s continual improvement initiative, IT-QA will standardize the processes for designing, developing and delivering products and services for our business partners across the WMATA Enterprise. This standardization enables IT to identify cost, time and process efficiencies. Related to this effort is the migration of select projects, such as Human Capital Management (HCM, PeopleSoft) and Contracts Life-Cycle Management (CLM) to use the tool in accordance with the SDLC framework being developed and implemented.

**Risk Management**

Establishment of IT-wide risk management framework that addresses risks related to the business processes and projects. IT-QA will be developing a consistent process for managing the lifecycle of corporate risk for the IT department, including developing processes for identifying and cataloging risks, and assessing these risks for proper response.

**Change Management**

With the enhancement and facilitation of the Change Control Board, IT-QA will be looking into ways to standardize and improve the change management process for the IT department for process, cost, and time efficiencies.

**Timekeeping Business Analysis, Quality Assurance and Testing**

In support of Timekeeping Automation project, the IT-QA office will be refining and decomposing business requirements for development and creating and executing test cases for validating system. The IT-QA team will also be supporting the quality assurance aspects of this project by developing and implementing a QA plan that includes auditing the project activities for consistency against IT department's established SDLC framework and setting up the change control process for managing the project business and technical requirements.

**Enterprise Architecture**

A newly established IT organization to facilitate development and translation of business vision and strategy into effective organizational change (through opportunity realization). Its vision is to align business, information, application, and technology architectural landscapes of the enterprise through the office of IT's Strategic Plan, Business Plan and Principles and thus to the goals of WMATA. The OEA will deliver value to its stakeholders by presenting IT leadership with recommendations for adjusting architectural decisions, IT assets and service acquisition strategies (investment plans), governing policies and implementation plans to achieve target business outcomes that capitalize on relevant business disruptions. Additionally, the OEA is mandated to establish and operate a scalable and highly available enterprise-wide real-time/on-demand data exchange gateway and data sharing infrastructure.

**Service Oriented Architecture**

The Vision of the Service Oriented Architecture (SOA) program is to establish a future-state integration platform using Enterprise Service Bus Architecture that fulfills the integration needs within the enterprise. To establish a SOA Centre of Excellence to research through the technological advancements in SOA world and propagates its benefits within the enterprise through tools, techniques, best practices, and effective governance policies.

**Business Intelligence Program**

In FY20167, we plan to focus on expanding our capabilities for predictive modeling, especially in the various maintenance functions of Metro, and on continuing to integrate asset, maintenance, operations, weather, and ridership data to support the ability to predict and analyze. This will involve some redesign of existing repositories as well as design of new ones, such as a rail data mart. As always, much of our effort will involve resolving data quality issues and making decisions about how best to source the data required for each particular purpose.

---

## **FY2016 Highlights and Major Accomplishments**

### **Asset Configuration Management**

Automates the design and maintenance of asset configurations, providing records of design change processes, and more accurate parts and configuration data for use by maintenance and procurement.

### **Bus Data Warehouse**

The Office of Information Technology supports the Bus Planning department by transforming raw data into business intelligence on subject areas such as schedule adherence, ridership, and system integration. In FY2016, accomplishments include a Bus System Integration data mart correlating bus ridership and fare box data to assist with detection and prevention of fare evasion.

### **Bus Mobile Apps**

In FY2016 accomplishments include the deployment of the first release of the Bus Stop Editor, enhancements to the Ridechecker mobile app and development of a web application for approval of the collected Ridechecker data. The Ridechecker mobile application is used to record passenger boarding and alighting. The data assists the Bus Planning department in planning routes and schedules.

### **Business Intelligence Program**

During FY2016, the Business Intelligence team, while continuing to support and enhance the products delivered during the past three years, expects to complete the following new work for HR, MTPD, Finance, SAFE, TRES, and ACCS:

- HCM Data Mart, Phase 1, with reporting and analysis to support position management, vacancy management/recruitment, and related tasks
- CAD/RMS reports transition for MTPD
- Expanded overtime, absence, and other time- and payroll-related analytics
- Fatigue Risk Management Reporting and Analysis, Phase 3
- Automated cash flow analysis
- MetroAccess safety reports

We are also continuing our collaborations with the Office of Performance, CHOS, and PLAN, developing products that give insight into operational efficiency and customer service. Some of these initiatives employ predictive modeling and text analytics:

- Individualized trip analysis for Metro riders
- Customer rail travel time analysis
- Management dashboards for elements of TIES
- Predictive modeling for Asset Return to Service
- Textual analysis of customer survey responses

### **Contract Lifecycle Implementation**

Beginning in early 2016, IT in partnership with WMATA's Procurement department, will introduce a new automated process Authority-wide that will manage procurement related activities

from planning through contract close out. The automated system will provide visibility into procurement requests, solicitations, and contracts, and will have self-service features for internal and external transactions with bidders and vendors. The system will be the single, centralized repository for managing all procurement related activities. The purpose is to modernize and automate the lifecycle of a contract, reduce manual efforts, streamline processes and leverage the existing PeopleSoft Financials and supply Chain (FSCM) system to support end to end procurement activities with audit trail of all actions, events, and modifications within one system. To achieve this objective, in FY2016, the PeopleSoft system is expanded to include a new module called Supplier Contract Management and new custom built features to accommodate activities related to initiating procurement requests, generating procurement-ready packages, collaboration, and securing approvals with automated workflow and routing. The remaining system functionality for solicitation and contract management will be delivered through a combination of re-configuring and customizing existing PeopleSoft modules called Strategic Sourcing, Supplier Portal and eProcurement. Its notification process will remind each team what has to be done and when, so that procurement related documentation and approvals remain on track.

CLM has a dedicated training team focused on delivering training to all users starting in February 2016. The system is planned to go live in March 2016.

### **Network and Communications**

In preparation for the Rail Station Router Upgrade program, a comprehensive technical and financial benchmark study of the dominate manufacturers' of network routers and services was conducted. The results of the benchmark was the selection of a manufacturer whose products were determined to yield the best value to Metro measured in both cost and performance over the expected life of the network router.

- Completed the deployment of wireless networking capabilities in 32 of 95 Rail Stations for Metro's operational use.
- Completed a benchmark study of the leading emergency telephone manufacturers. The results of the benchmark was the selection of a manufacturer whose product was determined to yield the best value to Metro measured in both cost and performance. Began the procurement activities for the selected manufacturer. Project targeted to be completed third quarter FY2016.
- Completed an analysis of Metro's communication systems' backup battery power system to determine if the power architecture was sufficient to maintain the communication system during a major power outage. As a result of this analysis, procurement activities are underway to increase the capacity of the backup battery system by 50.0 percent. The power system upgrade is scheduled to be completed by third quarter FY2016.
- Replaced the Rail Yard Tower and Block houses analog recording system with a new IP recording system that provides the ability to remotely monitor the availability and performance of the recording system. This enhancement enabled Metro to decommission the analog recording network.
- Completed the upgrade of eight Network core routers to next generation routers that provide enhanced security features.
- Deployed a new network timing architecture that will provide consistent time for all Metro operational systems.



- Since the beginning of FY2016, completed over 800 telecommunication service requests, work orders, and help desk tickets to address the request for new service installations, preventive and corrective maintenance, new facility installations, and facility expansions.
- Completed over 700 safety inspections of emergency telephones located throughout the Metrorail system, Metrorail stations, and parking garages.

### **Radio Outage Display**

The Metrorail radio system is a requirement for the smooth operations of Metrorail service on a day-to-day basis as well as allowing a proper response during an emergency incident.

It has been recognized that during emergency incidents it is critical to understand the quality of the radio reception in the area of the incident. It has also been recognized through emergency incidents that establishing a protocol for WMATA and the Metrorail jurisdictions to collaborate on radio testing, reporting and corrective actions is critical to public safety. Metrorail uses two separate public radio systems. WMATA's system operates at 490 MHz and is used exclusively by WMATA personnel. The Public Safety Radio System (PSRS) is separate, operates in the 700 and 800 MHz range and is designed for use by first responders for Metrorail emergency incidents.

In response to these needs, WMATA has taken the following actions. WMATA deployed the Radio Outage Display (RODS) system. The RODS was created to provide information concerning radio outages or poor reception areas within WMATA's rail system. It provides a fully-secured radio outage location map to the Rail Operations Control Center, to WMATA radio engineering and maintenance team as well as to external first responders in each jurisdiction. WMATA also deployed a tool allowing Metrorail jurisdictions to report Digital Audio Quality (DAQ). DAQ allows radio engineers and first responders to provide consistent DAQ ratings for the PSRS. The DAQ will provide consistent situational and operational awareness across Metrorail jurisdictions and WMATA.

### **Rail Scheduling Implementation**

This project focuses on business process improvement in rail service planning, scheduling, and daily operations of Metrorail service delivery. The expanding Metrorail system and complex track-maintenance work requires a comprehensive transit scheduling application to provide an effective scheduling tool and cost-effective operation solution to meet the ever increasing challenges in scheduling and operations, as well as financial constraints. In particular, the current scheduling and operations practice could not keep up with the limited supply, the increasing demand, the aging infrastructure, and the commitment of providing reliable and safe service to our customers. Optimized and effective usage of the limited resources will be core to solving these challenges.

Major Accomplishments Phase I & Phase II:

1. Phase I Detail Design Specifications (DDS) 100 percent completed
2. Phase I User Acceptance Test for Rail Scheduling 95 percent completed including exports to ROCS for RPM, PIDS, and AIMS.
3. Phase I and II hardware has been procured and Phase I hardware / software installed on all non-production environments
4. Phase I production environment fail-over tests conducted
5. HASTUS Oracle DB upgraded to 12c

6. Developed preliminary implementation plan and reviewed with business stakeholders and IT/CCB representatives
7. Finalized DDS for Phase II Bid/BidWeb for Daily Operations
8. Begin initial review of DDS for Daily Crew, EPM (e.g., discipline), Self-Service, and Analytics
9. Develop Phase II implementation strategy Spring 2016

### **Regional Bus Stop Program**

Gathered requirements with the WMATA Office of Bus Planning and our regional partners to establish and maintain a Regional Bus Stop Database for the purposes of sharing and improving the data, increasing productivity and increasing accessibility. The first release of a mobile app called the Bus Stop Editor was developed for the WMATA Bus Planning department to conduct surveys of existing bus stops in the field. The next release of the bus Stop Editor will add functionality to establish, abolish and relocate stops, and to automate the generation of service change work orders. A utility will be developed to allow regional agencies to upload their data to the centralized database on an ongoing basis. A mobile and web application will also be developed for the public to view the accessibility of stops and provide comments, which will assist in accessibility improvements to bus stops.

### **WMATA.COM Redesign Implementation**

FY2016 accomplishments include the design, development and implementation of our public website, WMATA.COM. A key objective of the redesign project is to provide a user-centric and re-architected web portal that will ensure compatibility across a variety of devices: desktop, mobile, tablets. (Currently, 58 percent of the traffic to WMATA.COM comes through mobile devices, and the number keeps growing.) The redesign project also includes implementation of a content management system (CMS) that allows internal content providers a more flexible platform for providing messaging and content to our customers. Trip planning and other way-finding tools are enhanced with “on-the-fly” mapping that can be saved or shared with others. Real-time alerts and other key traveling tools (Next Train, Next Bus) will be available from any page on the site. The ultimate goal is to improve customer interaction and communication through a more accessible and responsive website.

### **IT Security**

The migration of users from RSA to Entrust which integrates with Active Directory provides an enterprise wide capability for federal mandates for MTPD CJIS requirement, VDI two factor capabilities, and multiple enhancements for stronger authentication throughout WMATA’s infrastructure. Previous tokens expired after 3 years with a recurring cost of \$150 per user. New cost is \$25 per token with an estimated savings to WMATA of \$200K/year.

Deployment of an enhanced security event and incident management (SEIM) platform which allows IT security to analyze and correlate all security events in WMATA’s network. The IT SOC team has the capacity for security event monitoring from PCI compliance and risk management to security intelligence and operations. The SEIM solution sifts through millions of log records and correlates them to find the critical events that matter in real time via dashboards, notifications, and reports. This capability improves the accuracy and prioritization of security risks and compliance issues authority wide.

Web filtering services for WMATA's network has been enhanced to web security via group-based web browsing policies with user repository integration. Advanced SSL decryption allows for the protection for access to specific web sites while decrypting and inspecting traffic from unknown entities. Bandwidth control applied to designated categories ensure quality of service to business/mission critical network applications.

Aim Parallel Environment (AIMPE), a SCADA system for Rail Operations, is building a new network infrastructure to contain rail operations at JGB and CTF to include staging and lab areas. The environment was designed with security at the forefront and is in progress of implementation. Security equipment was procured, configured and installed at three individual sites. New features of the incumbent design over the predecessor include full mesh network and secure connectivity between the existing dual networks used for ROCC AIM systems. Security risk scanning and vulnerability update methodologies are in place to active security monitoring and alerting. The current LAB environment designs have been updated, secured and are now actively monitored.

WMATA Identity and Access Management (IAM) suite has been migrated from Windows to Linux platform for better performance and reliability. This service provides Single Sign On (SSO) for various enterprise applications to include Cognos, Travel Authorization / Travel Reimbursement, Board Agenda Review and Nomination Form. PeopleSoft Finance has been integrated to automate application access removal for separated users to comply with FTA audit requirements. Automation of user activation has been implemented for the annual security awareness training process. Integration between Active Directory and PeopleSoft has provided automation for granting network access for new hires and the automatic removal of network access for separated users, eliminating manual processes, and minimizing organization exposure to legacy accounts.

During this period, Metro IT Security revised position descriptions to match industry standards and re-organized department staff. MITS sought to improve the control of project and task flow and to provide consistency in expectations. To accomplish this, IT established a customer facing Program Manager's role and a service focused operations team. The Program Manager has been assigned and is integrated in daily activities. The operations team is in the process of standing up.

FY2015 closed out a long standing staff augmentation contract which made up 35 percent of MITS staff. The contract was awarded and personnel switch has been completed. The current contract is stable for the next five years.

MITS has completed numerous projects for customers to include development of NEPP datacenter build with security architecture design and deployment, rollout of a CAD/RMS (Computer Aided Dispatch / Remote Management System) network allowing secure remote connectivity for MTPD, TWDT 7K which provides secure wireless communication to the rail cars, and the expansion of WMATA guest wireless services at CTF. In addition, the MITS created a new secure environment for ESS to have a separate off-production network for testing of video streaming to mitigate risk from network disruptions caused by testing multicasting on the production network.

Security Center is used as a vulnerability scanning tool to identify vulnerabilities on network devices, servers, workstations, and databases. MITS has rolled an Authority-wide scanning portal which allows PCI system administrators, DCI system administrators, and DBA's access to scan

---

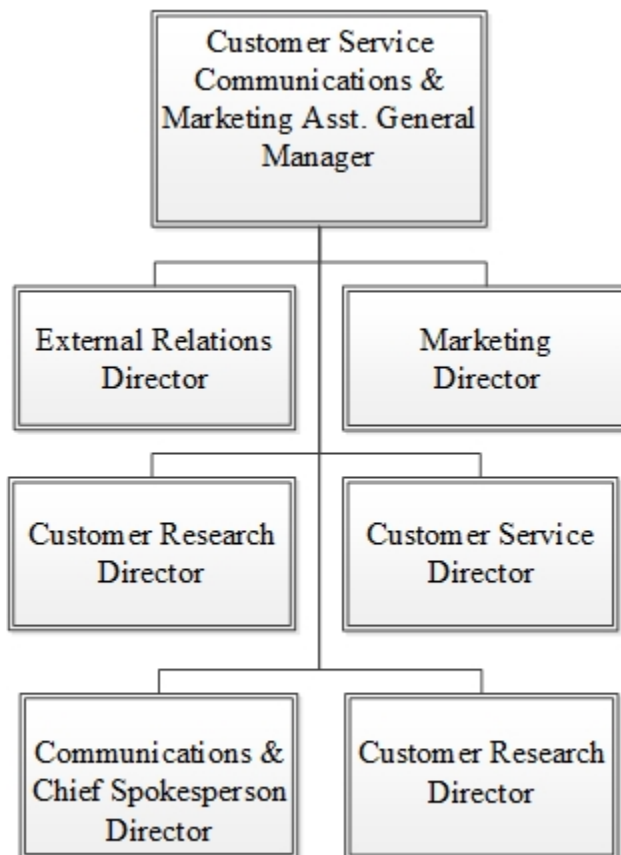
their own IT environment for vulnerabilities and increases awareness and minimize our risk profile. Automated scan schedules for systems have been initiated which evaluate vulnerabilities as well as patching on a monthly and quarterly basis, as defined for each type of system. CIS benchmarks have been created for WMATA databases and continue to be the benchmarks for all system types throughout the WMATA's Vulnerability Management Program.

WMATA completed another successful PCI DSS project that lead to receiving another year of compliance. MITS successfully implemented new, repeatable processes, for collecting artifacts and answering the call of compliance which has reduced time to completion. Additionally, MITS submitted a complete process package to help the authority in achieving our ISO-9000 certification. The package is to be used as a template for how to execute a complete process.

The Risk and Compliance department continues to execute and offer support with various audits to include the FTA, FMO and OIG. Currently MITS is involved with answering the call to complete the OIG audit on Oracle Databases. MITS created standardized processes for database security configurations and procedures for database scanning. MITS has also executed an outreach effort to our counterparts to make them aware of the standardization and assist with efforts to classify their data. In the past 12 months we have established a process of performing risk assessment for IT projects and compliance review which includes documented procedures and forms for performing various risk assessments.

Supported multiple WMATA Bus & Rail projects for initial risk assessment to include Metro Network extension to Van Buren office, extension of WMATA network to Dulles trailer, and Bus Traffic Signal Prioritization.

### Customer Service, Communications and Marketing



	Actual 2014	Actual 2015	Approved Budget 2016	Proposed Budget 2017	Change	Variance
<i>(Dollars in Thousands)</i>						
PERSONNEL COST	\$12,212	\$13,004	\$12,893	\$13,772	\$879	6.8%
NONPERSONNEL COST	\$4,882	\$5,609	\$5,820	\$7,247	\$1,427	24.5%
<b>TOTAL COST</b>	<b>\$17,094</b>	<b>\$18,613</b>	<b>\$18,713</b>	<b>\$21,019</b>	<b>\$2,306</b>	<b>12.3%</b>
<b>BUDGETED POSITIONS</b>	129	130	127	129	2	1.6%

**Purpose**

The Customer Service Communications and Marketing (CSCM) department supports all of Metro’s strategic goals and builds confidence in the Metro brand.

**Responsibilities**

CSCM is responsible for communicating, marketing and informing customers, employees and stakeholders about Metro’s services, programs and policies. CSCM also serves as the customer advocate within Metro by seeking input from customers and ensuring that feedback is considered

in decision making throughout the Authority. CSCM carries out its responsibilities through the following offices:

- Customer Service (CSVC)
- Customer Care (CARE) Media Relations (MREL)
- External Relations (EREL)
- Employee Communications (EMPL)
- Marketing and Advertising (MKTG)
- Customer Research (RESR)

### **FY2017 Business Plan**

The Department of Customer Service, Communications and Marketing (CSCM) has multiple new initiatives underway that will help Metro attract and retain riders, improve passenger communications, expand two-way dialogue with customers, enhance customer care, better engage employees, and increase revenues from advertising. The initiatives include:

### **New To FY2017**

- Attract and Retain Riders:
  - Customer Research will inform the Authority specifically what changes are needed to retain and win riders back who may have switched modes.
  - Better Bus Marketing Campaign – as Metro works with jurisdictions on traffic signal prioritization to make buses 20% faster, Marketing will launch a campaign to promote improvements
  - New Pass Products – work to develop and market new pass programs to universities and commuters.
  - SmartBenefits Account Growth – in the coming fiscal year, targeting an additional 350 new employer accounts
- Improve Passenger Communications:
  - Embed communicators in the Rail Operations Control Center to develop technology and business process improvements that will deliver more real-time information to customers using digital channels
  - Following launch of improved website, developing a new mobile app that allows service information to be delivered passively to cell phones using GPS technology
  - Launch Metro TV program via YouTube and local public TV stations
- Expand Two-Way Dialogue:
  - Modernize Customer Contact Center with new customer relationship software, real-time social media engagement, and simplified customer complaint handling
  - Create small staff of customer advocates to provide mobile, in station/transit center presence and high touch customer support
  - Implement FTA-mandated Public Participation Plan to ensure inclusive strategies around feedback for planned projects
  - Grow Amplify—the online Customer Community—to expand voice of customer in decision making
  - Engage the Riders Advisory Council in broader customer feedback to increase effectiveness

- Engage Employees:
  - Provide station managers with asset tool that supplies real-time information about repair status for fare vendors, elevators and escalators, and other station equipment.
  - Continue new customer care programs that define customer service for Metro's workforce, institutionalize it through job descriptions and performance evaluations, enhance training, and celebrate success through employee recognition programs
  - Expand Local Customer Care Committee pilot from two to four divisions in 2015, to include all rail and bus divisions by the end of calendar year 2017
- Increase Advertising Revenue:
  - Add \$2.0 million or more to the \$20.0 million annual revenue goal through expansion of digital advertising and other categories.

### **FY2016 Highlights and Major Accomplishments**

- Issued 17 alerts, aid MTPD in apprehension of crime suspects (MREL).
- Improved neutral or balanced tone in media coverage by 20 percentage points (MREL).
- Increased social media followers by 10 percent across all channels (MREL).
- Contributed to rider injury reduction in target stations with 10 prevention events (EREL).
- Seamlessly implemented Public Participation Plan (PPP) throughout Metro; significantly increased internal and external stakeholder engagement around service (EREL).
- Delivered extensive communications support services to Interim GM and ELT (CSCM).
- Launched 7000 series rail car with positive feedback from customers and stakeholders (CSCM).
- Produced award-winning marketing campaigns Metroway and Silver Line (MKTG).
- Increased SmartBenefits enrollment, adding 65 new companies (MKTG).
- Launched 4 local customer care committees, held over 20 town hall style meetings, introduced new weekly Hot Sheets for frontline employees (CSCM).
- Developed new business tool for station managers to monitor repairs; launched customer service employee recognition program (CSCM).
- Executed internal department customer studies around MTPD injuries, COUN Performance; DDOT Peapod; Smartbenefits service quality; other studies utilized for decision making (RESR).
- Conducted studies, surveys, and focus groups to support customer care initiative, employee engagement improvement goals, fare pilot, and rail travel (RESR).

## Chapter 4 - Proposed FY2017 Capital Budget

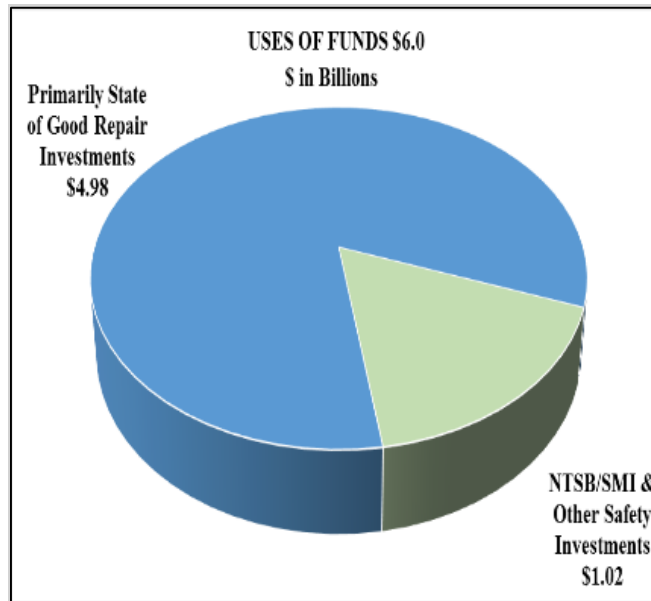
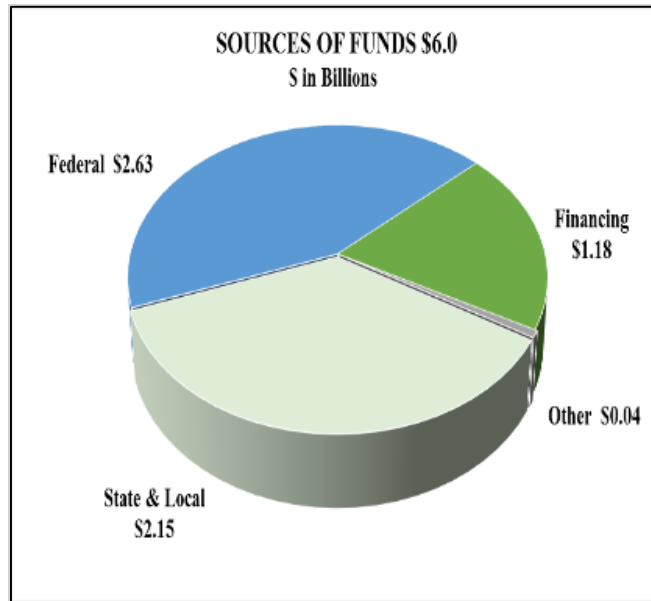


*L'Enfant Plaza Escalator Canopy*



**Overview**

Metro’s proposed FY2017-2022 Capital Improvement Program (CIP) totals \$6.0 billion, with funding from the Federal government, State and Local contributions, long-term financing, and other sources. The proposed investments focus on ensuring the safety of Metro system and improving the effectiveness of the rail and bus networks by enhancing the condition of Metro’s assets through investment in replacement and state of good repair. Of this \$6.0 billion total, \$1.1 billion is proposed to be spent in FY2017.



The FY2017-2022 proposed CIP contains more than \$1.0 billion in safety-enhancing investments to fund all current National Transportation Safety Board (NTSB) recommendations and FTA's Safety Management Inspection (SMI) requirements, as well as other critical investments that will improve and strengthen the safety of the Metro system. These investments include more than \$455 million to complete the delivery and commissioning of new 7000 series cars to replace the 1000 series cars and more than \$310 million to replace and upgrade the Authority's radio infrastructure and install neutral host wireless technology throughout the tunnels. Metro is committed to advancing these important initiatives in cooperation with our federal partners.

The proposed FY2017-2022 CIP also continues to advance an aggressive investment plan, totaling nearly \$5 billion, designed to restore and maintain infrastructure, facilities, power systems, vehicles, and other assets throughout the system in a state of good repair.

### **Sources of Funds**

Federal grants are expected to fund \$2.6 billion (44 percent) of the \$6 billion FY2017-2022 capital program, with state and local sources funding the remaining \$3.4 billion (56 percent). The FY2017-2022 CIP assumes that state and local funding will consist of \$2.2 billion in cash contributions and \$1.2 billion of long-term financing.

The primary fund sources are described below. The table below displays funding sources in the year in which funding is anticipated to be expended, consistent with the Authority's expenditure based budgeting principles.

Washington Metropolitan Area Transit Authority  
FY2017-2022 Proposed Capital Improvement Program (CIP)

	FY2017 - FY2022 Plan								FY2011-2022 Total
	FY2016 Forecast	FY2017 Proposed	FY2018 Plan	FY2019 Plan	FY2020 Plan	FY2021 Plan	FY2022 Plan	FY2017-2022 Total	
<b>Federal</b>									
Federal Formula Programs	\$439.9	\$285.6	\$285.6	\$285.6	\$285.6	\$285.6	\$285.6	\$1,713.6	\$3,396.4
Federal PRIIA	\$200.2	\$170.0	\$148.5	\$148.5	\$148.5	\$148.5	\$148.5	\$912.5	\$1,810.2
Resiliency Grant	\$1.9	\$12.2	\$7.4					\$19.6	\$21.6
Other Federal Grants	\$34.1	\$1.7	\$0.6	\$0.6	\$0.6	\$0.6	\$0.6	\$4.9	\$63.4
Subtotal Federal	\$676.1	\$469.5	\$442.1	\$434.7	\$434.7	\$434.7	\$434.7	\$2,650.6	\$5,291.4
<b>State and Local</b>									
Match to Federal Formula	\$110.0	\$71.4	\$71.4	\$71.4	\$71.4	\$71.4	\$71.4	\$428.4	\$858.3
System Performance	\$61.0	\$118.1	\$125.9	\$137.7	\$135.4	\$143.5	\$150.6	\$811.2	\$1,430.8
State and Local PRIIA	\$200.2	\$148.5	\$148.5	\$148.5	\$148.5	\$148.5	\$148.5	\$891.0	\$1,788.7
Rail Power System Upgrades	\$17.7								\$17.7
Other State and Local	\$8.5	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$1.0	\$10.8
Subtotal State/Local before Carryover	\$397.3	\$338.1	\$346.0	\$357.8	\$355.5	\$363.6	\$370.7	\$2,131.6	\$4,106.4
State and Local PRIIA - Carryover		\$21.5						\$21.5	\$21.5
Subtotal State and Local	\$397.3	\$359.6	\$346.0	\$357.8	\$355.5	\$363.6	\$370.7	\$2,153.0	\$4,127.8
<b>Other Sources</b>									
MetroMatters									\$109.8
Insurance Proceeds	\$2.3	\$2.5	\$0.6	\$0.6	\$0.6	\$0.6	\$0.6	\$5.6	\$31.6
Land Sale Proceeds	\$16.0								\$28.3
Joint Development Proceeds	\$3.5								\$3.5
Miscellaneous	\$0.6	\$4.1	\$2.5					\$6.5	\$22.7
Subtotal Other Sources	\$22.4	\$6.6	\$3.1	\$0.6	\$0.6	\$0.6	\$0.6	\$12.1	\$195.9
<b>Financing</b>									
Planned Long-Term Financing		\$287.7	\$249.5	\$221.7	\$201.1	\$117.7	\$100.5	\$1,178.3	\$1,178.3
Subtotal Financing		\$287.7	\$249.5	\$221.7	\$201.1	\$117.7	\$100.5	\$1,178.3	\$1,178.3
<b>Metro 2025 Investment</b>									
Metro 2025 Investment	\$46.0	\$5.0	\$1.0					\$6.0	\$75.0
Subtotal Metro 2025	\$46.0	\$5.0	\$1.0					\$6.0	\$75.0
<b>Total</b>	<b>\$1,141.7</b>	<b>\$1,128.3</b>	<b>\$1,041.7</b>	<b>\$1,014.8</b>	<b>\$992.0</b>	<b>\$916.7</b>	<b>\$906.5</b>	<b>\$6,000.0</b>	<b>\$10,868.4</b>

**Federal Programs**

Federal program funding is subject to Federal authorization and appropriation and the annual award of grants by the Federal Transit Administration (FTA).

1. **Federal Formula Programs**

Federal formula programs are projected to provide a total of \$1.7 billion over the six year period, \$285.6 million of which is planned for investment during FY2017. The forecast will be updated when Fixing America's Surface Transportation Act (FAST) projections are available.

2. **Federal Passenger Rail Investment and Improvement Act (PRIIA)**

The proposed FY2017-2022 capital plan assumes a total of \$912.5 million of PRIIA funding, \$170.0 million of which is planned for investment during FY2017. Of this total, \$891 million is planned to be awarded during the FY2017-2022, supplemented by \$21.5 million projected to be carried forward from FY2016. **This plan assumes that PRIIA will be appropriated each year and reauthorized by FY2021.**

**State and Local Programs**

Jurisdictional capital funding, except for PRIIA, is allocated among the jurisdictions based on operating subsidy by mode and asset type. The CIP applies specific jurisdictional operating

subsidy allocations to Metrobus, Metrorail, and MetroAccess projects to determine an overall blended allocation rate by jurisdiction for CIP contributions. The table displaying the allocation of state and local contributions contains anticipated jurisdictional contributions for each of the six years, by type of funding. The following table shows anticipated quarterly contributions by jurisdiction for FY2017, compared to FY2016.

1. State and Local Match to Federal Formula Programs

A total of \$428.4 million of state and local funds will be needed to match federal formula program grants, \$71.4 million of which is planned for investment during FY2017.

2. State Match to Federal PRIIA Program

The FY2017-2022 proposed CIP financial plan assumes the PRIIA legislation will be extended beyond FY2020 and that the District of Columbia, the State of Maryland, and the Commonwealth of Virginia will contribute \$148.5 million per year to match Federal PRIIA, consistent with the jurisdictional commitment to fund the safety, state of good repair, and preventive maintenance needs of the Metro system. A total of \$891 million is forecasted to be billed to jurisdictions in FY2017-2022, and an additional \$21.5 million, from prior years, is forecasted to be spent in FY2017.

3. System Performance

A proposed total of \$811.2 million from state and local system performance funding will support the FY2017-2022 CIP, with \$118.1 million programmed for investment during FY2017. System performance funding is contributed by the jurisdictions to advance additional capital investments beyond those funded by federal grants and match.

4. Other Fund Sources

The proposed CIP includes investments to advance projects that are funded through competitively awarded discretionary grants, congestion mitigation and air quality funding that is passed to Metro through a local jurisdictional agreement, and other funding sources with dedicated uses such as insurance proceeds and land revenues. These fund sources total approximately \$44.4 million in FY2017-2022.

5. Financing/Debt Strategy

The proposed FY2017-2022 CIP financial plan includes a total of \$1,178.3 million of planned long-term debt, \$287.7 million of which is planned for use in FY2017. In accordance with the agreement made in the Capital Funding Agreement (CFA), Metro will identify the portion of future allocated contributions for debt service payments in future proposed budgets and Metro will notify the jurisdictions at least 120 days in advance of any long-term debt issuance.

FY2017-2022 Capital Improvement Program (CIP)  
Financial Plan - Allocation of State and Local Contributions  
(dollars in millions)

	FY2016		FY2017 - FY2022 Plan										FY2011-2022
	Estimate	Forecast	FY2017		FY2018	FY2019	FY2020	FY2021	FY2022	FY2022	FY2017-2022	Total	
			Carry-Over	Proposed									Plan
<b>Federal Formula Match &amp; System Performance</b>													
District of Columbia	\$327.1	\$63.5	\$70.4	\$73.3	\$77.7	\$76.9	\$79.9	\$82.5	\$85.1	\$85.1	\$460.7	\$851.3	
Montgomery County	150.0	29.1	32.3	33.6	35.7	35.3	36.6	37.9	39.0	39.0	211.4	390.5	
Prince George's County	155.9	30.3	33.6	35.0	37.0	36.6	38.1	39.3	40.5	40.5	219.5	405.7	
Maryland Subtotal	\$505.9	\$59.4	\$65.9	\$68.6	\$72.7	\$71.9	\$74.7	\$77.2	\$79.6	\$79.6	\$430.9	\$796.2	
City of Alexandria	39.5	7.7	8.5	8.9	9.4	9.3	9.6	10.0	10.2	10.2	55.6	102.7	
Arlington County	73.5	14.3	15.8	16.5	17.5	17.3	17.9	18.5	19.1	19.1	103.5	191.2	
City of Fairfax	2.3	0.4	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	3.2	5.9	
Fairfax County	129.0	25.1	27.8	28.9	30.7	30.3	31.5	32.6	33.5	33.5	181.8	335.9	
City of Falls Church	2.8	0.5	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	3.9	7.2	
Virginia Subtotal	\$247.0	\$55.9	\$53.2	\$54.9	\$58.2	\$57.6	\$59.8	\$61.8	\$64.4	\$64.4	\$345.5	\$648.4	
Subtotal Federal Formula Match & System Performance	\$880.0	\$170.9	\$189.5	\$197.3	\$209.1	\$206.8	\$214.9	\$222.0	\$229.5	\$229.5	\$1,239.6	\$2,290.5	
<b>CMAQ Grant Match</b>													
Commonwealth of Virginia (DRPT)		8.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	1.0	9.4	
Subtotal CMAQ Match		\$8.5	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$1.0	\$9.4	
<b>State and Local PRIA</b>													
District of Columbia	232.5	66.7	56.7	49.5	49.5	49.5	49.5	49.5	49.5	49.5	304.2	603.4	
State of Maryland	232.5	66.7	56.7	49.5	49.5	49.5	49.5	49.5	49.5	49.5	304.2	603.4	
Commonwealth of Virginia	66.7	20.2	56.7	49.5	49.5	49.5	49.5	49.5	49.5	49.5	304.2	603.4	
Subtotal State and Local PRIA	\$697.5	\$200.2	\$170.0	\$148.5	\$148.5	\$148.5	\$148.5	\$148.5	\$148.5	\$148.5	\$912.5	\$1,810.2	
<b>Rail Power System Upgrades</b>													
District of Columbia		6.6										6.6	
State of Maryland		6.2										6.2	
Commonwealth of Virginia (NYTA)		5.0										5.0	
Subtotal Power Upgrades		\$17.7										\$17.7	
<b>Metro 2025 Investment</b>													
District of Columbia	\$7.7	\$15.3	\$1.7	\$0.4							\$2.0	\$25.0	
Montgomery County				0.2							0.2	0.2	
Prince George's County				0.2							0.2	0.2	
State of Maryland				1.7							1.7	24.7	
Maryland Subtotal				\$0.3							\$2.0	\$25.0	
City of Alexandria	0.8	1.6	0.2	0.0							0.2	2.6	
Arlington County	1.5	2.9	0.3	0.1							0.4	4.8	
City of Fairfax	0.0	0.1	0.0	0.0							0.0	0.1	
Fairfax County	2.6	5.1	0.6	0.1							0.7	8.4	
City of Falls Church	0.1	0.1	0.0	0.0							0.0	0.2	
Commonwealth of Virginia	2.8	5.5	0.6	0.0							0.6	8.9	
Virginia Subtotal	\$7.7	\$15.3	\$1.7	\$0.3							\$1.9	\$24.9	
Subtotal Metro 2025 Investment	\$23.0	\$46.0	\$5.0	\$1.0							\$6.0	\$75.0	
<b>Total</b>	<b>\$1,600.5</b>	<b>\$443.3</b>	<b>\$26.5</b>	<b>\$347.0</b>	<b>\$357.8</b>	<b>\$355.5</b>	<b>\$363.6</b>	<b>\$370.7</b>	<b>\$375.0</b>	<b>\$375.0</b>	<b>\$2,159.0</b>	<b>\$4,202.8</b>	

**FY2017-2022 Capital Improvement Program**  
**Financial Plan - Allocation of FY2016 and FY2017 State and Local Contributions**  
(dollars in millions)

	FY2016 Actual					FY2017 Proposed				
	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total
<b>Federal Formula Match &amp; System Performance</b>										
District of Columbia	\$19.0	\$15.0	\$17.0	\$17.0	\$68.0	\$19.7	\$15.5	\$17.6	\$17.6	\$70.4
Montgomery County	8.7	6.9	7.8	7.8	31.2	9.0	7.1	8.1	8.1	32.3
Prince George's County	9.1	7.1	8.1	8.1	32.4	9.4	7.4	8.4	8.4	33.6
Maryland Subtotal	17.8	14.0	15.9	15.9	63.6	18.4	14.5	16.5	16.5	65.9
City of Alexandria	2.3	1.8	2.1	2.1	8.2	2.4	1.9	2.1	2.1	8.5
Arlington County	4.3	3.4	3.8	3.8	15.3	4.4	3.5	4.0	4.0	15.8
City of Fairfax	0.1	0.1	0.1	0.1	0.5	0.1	0.1	0.1	0.1	0.5
Fairfax County	7.5	5.9	6.7	6.7	26.8	7.8	6.1	6.9	6.9	27.8
City of Falls Church	0.2	0.1	0.1	0.1	0.6	0.2	0.1	0.1	0.1	0.6
Virginia Subtotal	14.4	11.3	12.8	12.8	51.3	14.9	11.7	13.3	13.3	53.2
<b>Subtotal Formula Match &amp; System Performance</b>	<b>51.2</b>	<b>40.2</b>	<b>45.7</b>	<b>45.7</b>	<b>182.9</b>	<b>53.0</b>	<b>41.7</b>	<b>47.4</b>	<b>47.4</b>	<b>189.5</b>
<b>State and Local PRIIA</b>										
District of Columbia	16.3	13.4	9.9	9.9	49.5	16.3	13.4	9.9	9.9	49.5
State of Maryland	16.3	13.4	9.9	9.9	49.5	16.3	13.4	9.9	9.9	49.5
Commonwealth of Virginia	16.3	13.4	9.9	9.9	49.5	16.3	13.4	9.9	9.9	49.5
<b>Subtotal State and Local PRIIA</b>	<b>49.0</b>	<b>40.1</b>	<b>29.7</b>	<b>29.7</b>	<b>148.5</b>	<b>49.0</b>	<b>40.1</b>	<b>29.7</b>	<b>29.7</b>	<b>148.5</b>
<b>CMAQ Match</b>										
Commonwealth of Virginia (DRPT)			2.7	3.3	6.0			0.1	0.1	0.2
<b>Subtotal CMAQ Match</b>			<b>2.7</b>	<b>3.3</b>	<b>6.0</b>			<b>0.1</b>	<b>0.1</b>	<b>0.2</b>
<b>Rail Power System Upgrades</b>										
District of Columbia	1.0	1.8	1.8	1.9	6.6					
State of Maryland	0.9	1.7	1.7	1.8	6.2					
Commonwealth of Virginia (NVTA)	0.7	1.4	1.4	1.4	5.0					
<b>Subtotal Power Upgrades</b>	<b>2.7</b>	<b>5.0</b>	<b>5.0</b>	<b>5.1</b>	<b>17.7</b>					
<b>Total</b>	<b>\$102.9</b>	<b>\$85.3</b>	<b>\$83.1</b>	<b>\$83.9</b>	<b>\$352.2</b>	<b>\$102.1</b>	<b>\$81.8</b>	<b>\$77.1</b>	<b>\$77.2</b>	<b>\$338.1</b>

**FY2017-2022 Capital Improvement Program (CIP)**  
**Planned Financing Plan**  
(dollars in millions)

	FY2011-2015 Actual	FY2016 Forecast	FY2017 - FY2022 Plan						FY2017-2022 Total	FY2011-2022 Total
			FY2017 Proposed	FY2018 Plan	FY2019 Plan	FY2020 Plan	FY2021 Plan	FY2022 Plan		
<b>Financing</b>										
Planned Long-Term Financing	\$0.0	\$0.0	\$287.7	\$249.5	\$221.7	\$201.1	\$117.7	\$100.5	\$1,178.3	\$1,178.3

---

## Uses of Funds

The FY2017-2022 capital plan proposes \$6 billion for safety-related and state of good repair investments. The proposed FY2017 budget represents \$1.1 billion of this total. Proposed FY2017 CIP investments are summarized in two tables. First, the investments are displayed by asset category, and then they are listed in detail by subcategory. In addition, the capital program includes \$160.5 million in reimbursable projects that are listed later in this chapter.

### **Safety-Related Investments**

The FY2017-2022 CIP proposes more than \$1 billion in funding of safety-related investments, including full funding of all current NTSB recommendations and SMI requirements. The proposed FY2017 budget contains \$302 million for safety related investments, including but not limited to the following significant investments:

- Continuation of the replacement of the three hundred 1000-series railcars with the new 7000-series.
- The Radio & Cellular Infrastructure Renewal project is planned to complete the design work for the above ground elements of the new 700 MHz radio system and complete installation of cable trays along the Red Line in FY2017.
- Complete the project to replace all the Generation 2 track circuits in the rail system, which is a National Transportation Safety Board Recommendation and Safety Management Inspection corrective action.
- Installation of event recorders and reliability improvements to the Vehicle Monitoring Systems (VMS) on legacy fleets.
- Development of automated processes to record maintenance and inspection activities for tunnel ventilation systems, drainage pumping stations, and other critical systems.

### **State of Good Repair Investments**

In addition to the safety investments, the FY2017-2022 CIP proposes nearly \$5.0 billion in funding to repair and replace assets to bring them into a state of good repair. Key state of good repair investments in this six year plan include:

- Continuation of on-going rehabilitation and replacement of track and rail structures to achieve a state of good repair and a steady state of maintenance
- Replacement, rehabilitation, and repair of railcars, in addition to the NTSB-directed replacement of the three hundred 1000-series railcars, including:
  - Replacement of the 4000-series railcars (100)
  - Replacement of the 5000-series railcars (192)
  - Purchase of additional 7000-series railcars (28)
  - Initiation of the replacement of the 2000/3000-series railcars
- Continuation of the railcar scheduled preventive maintenance and component replacement program that promotes a state of good repair and improves the safety and reliability of the vehicles
- Replacement, rehabilitation, and repair of buses

- Replacement of approximately 85 buses per year
- Rehabilitation of approximately 100 buses per year
- Continuous scheduled preventive maintenance on the entire bus fleet
- Procurement of approximately 175 MetroAccess vehicles per year
- Replacement of escalators – approximately 96 escalators
- Rehabilitation of escalators – approximately 144 escalators
- Rehabilitation of elevators – approximately 104 elevators
- Major investment in the replacement or refurbishment of fare gates and fareboxes
- Commencement of phase two of the Red Line rehabilitation effort and completion of the Orange/Blue line rehabilitation effort

The proposal includes \$825 million for state of good repair investments in FY2017, including but not limited to the following significant investments:

- Continued rail line segment rehabilitation on the Orange/Blue Lines
- Increased investment in railcar rehabilitation program to rebuild railcar components to sustain the railcar lifecycle and improve reliability.
- Continue rehabilitation of Alexandria, Brentwood, and New Carrollton rail yards
- Full rehabilitation of 12 Metro stations and smaller scale rehabilitations of another 12 Metro stations
- Replacement of 22 escalators and rehabilitation of an additional 10 escalators
- Rehabilitation of 15 elevators
- Replacement of approximately 150 buses and the rehabilitation of another 100 buses
- Advance the replacement of Southern Avenue and Royal Street bus garages with new facilities at Andrews Federal Campus and Cinder Bed Road
- Commencement of the implementation phase of fare collection equipment replacement/refurbishment



**FY2017-2022 Capital Plan by CIP Category**  
(dollars in millions)

	FY2011-2015 Estimate		FY2016 Forecast		FY2017 - FY2022 Plan										FY2011-2022 Total
					FY2017 Proposed	FY2018 Plan	FY2019 Plan	FY2020 Plan	FY2021 Plan	FY2022 Plan	FY2017 - 2022 Total				
Vehicle / Vehicle Parts	\$1,098.3	\$462.9			\$497.7	\$379.3	\$452.4	\$479.7	\$497.6	\$482.8	\$2,789.6	\$2,789.6	\$4,350.8		
Rail System Infrastructure Rehabilitation	709.4	118.0			86.7	63.9	20.4	21.6	22.0	37.7	252.4	252.4	1,079.8		
Maintenance Facilities	422.5	159.3			120.4	117.5	41.0	42.6	39.9	28.2	389.6	389.6	971.4		
Systems and Technology	390.1	153.6			139.2	139.7	152.6	136.7	104.0	116.9	789.1	789.1	1,332.9		
Track and Structures	333.7	81.1			77.6	86.1	85.6	88.9	91.6	97.1	527.0	527.0	941.8		
Passenger Facilities	497.5	110.5			124.8	122.3	112.7	112.7	81.5	70.2	624.3	624.3	1,232.3		
Maintenance Equipment	144.8	23.6			55.0	82.5	103.7	71.6	49.0	44.8	406.6	406.6	575.0		
Other Facilities	87.8	13.3			5.6	7.9	8.4	5.0	6.4	4.2	37.4	37.4	138.5		
Project Management and Support	42.7	19.3			21.2	42.4	38.0	33.0	24.6	24.7	184.0	184.0	246.0		
<b>Total</b>	<b>\$3,726.7</b>	<b>\$1,141.7</b>			<b>\$1,128.3</b>	<b>\$1,041.7</b>	<b>\$1,014.8</b>	<b>\$992.0</b>	<b>\$916.7</b>	<b>\$906.5</b>	<b>\$6,000.0</b>	<b>\$6,000.0</b>	<b>\$10,868.4</b>		

**Multi-Year CIP Investments: FY2017-2022**  
(dollars in millions)

	FY2016 Forecast	FY2017 - FY2022 Plan						FY2017-2022 Total
		FY2017 Proposal	FY2018 Plan	FY2019 Plan	FY2020 Plan	FY2021 Plan	FY2022 Plan	
<b>A Vehicles/ Vehicle Parts</b>								
Replacement of Rail Cars	\$154.9	\$202.3	\$160.7	\$227.7	\$200.0	\$212.7	\$190.2	\$1,193.6
Replacement of Buses	147.7	65.0	50.8	50.8	102.7	102.7	102.7	474.8
Rehabilitation of Rail Cars	83.9	130.3	91.3	93.1	95.0	96.9	98.9	605.6
Rehabilitation of Buses	51.9	82.9	62.3	64.5	65.8	68.2	69.2	412.9
Replacement of MetroAccess Vehicles	12.4	12.1	9.8	10.3	10.9	11.5	13.4	68.0
Replacement of Service Vehicles	7.9	2.0	1.8	2.3	1.9	2.0	4.8	14.8
Rail Car Fleet Expansion	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bus Fleet Expansion	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bus Enhancements	3.9	3.1	2.6	3.6	3.4	3.6	3.6	19.9
Subtotal	\$462.9	\$497.7	\$379.3	\$452.4	\$479.7	\$497.6	\$482.8	\$2,789.6
<b>B Rail System Infrastructure Rehabilitation</b>								
Rail Line Segment Rehabilitation	83.5	69.5	45.5	9.5	10.6	11.0	26.5	172.5
Rail System Safety Rehabilitation	34.5	17.2	18.4	10.9	11.1	11.1	11.2	79.9
Subtotal	\$118.0	\$86.7	\$63.9	\$20.4	\$21.6	\$22.0	\$37.7	\$252.4
<b>C Maintenance Facilities</b>								
Rehabilitation and Replacement of Bus Garages	46.6	63.0	85.8	25.4	23.9	25.2	17.3	240.5
Maintenance of Bus Garages	11.5	1.0	0.0	0.0	0.0	0.0	0.0	1.0
Maintenance of Rail Yards	40.5	31.2	15.6	0.0	0.0	0.0	0.0	46.8
Rail Maintenance Facilities	45.7	12.7	0.0	0.0	0.0	0.0	0.0	12.7
Environmental Compliance Projects	6.4	8.6	14.8	14.6	17.7	13.7	9.9	79.3
Maintenance Bus and Rail Facilities	7.1	3.9	1.3	1.0	1.0	1.0	1.0	9.3
Expansion of Bus Garages	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal	\$159.3	\$120.4	\$117.5	\$41.0	\$42.6	\$39.9	\$28.2	\$389.6
<b>D Systems and Technology</b>								
Power System Replacement/Upgrades - Rail	65.0	57.1	55.6	57.0	58.4	45.0	73.9	347.0
Operations Support Software	28.5	32.9	26.4	26.2	30.8	29.0	29.2	174.4
Business Support Software & Equipment	28.6	27.4	23.4	19.5	12.2	20.2	13.8	116.5
Rail Fare Equipment	31.5	21.8	34.3	49.9	35.4	9.7	0.0	151.2
Subtotal	\$153.6	\$139.2	\$139.7	\$152.6	\$136.7	\$104.0	\$116.9	\$789.1
<b>E Track and Structures</b>								
Track Rehabilitation	75.1	70.5	76.1	77.0	79.8	82.1	86.3	471.7
Station/Tunnel Rehabilitation	6.0	7.1	10.0	8.6	9.1	9.6	10.8	55.3
Subtotal	\$81.1	\$77.6	\$86.1	\$85.6	\$88.9	\$91.6	\$97.1	\$527.0
<b>F Passenger Facilities</b>								
Elevator/Escalator Facilities	54.9	52.6	55.9	60.5	62.3	27.3	28.5	287.2
Maintenance of Rail Station Facilities	38.4	53.3	37.2	24.3	30.0	29.5	29.5	203.9
Bicycle & Pedestrian Facilities	2.0	2.4	3.3	3.6	3.6	3.6	3.6	19.9
Rail Station: Capacity/Enhancements	5.2	13.9	18.2	24.2	16.6	20.9	8.4	102.1
Bus Priority Corridor Improvements	9.8	2.5	7.5	0.0	0.0	0.0	0.0	10.0
Rail Station Equipment	0.3	0.2	0.2	0.2	0.2	0.2	0.2	1.2
Subtotal	\$110.5	\$124.8	\$122.3	\$112.7	\$112.7	\$81.5	\$70.2	\$624.3
<b>G Maintenance Equipment</b>								
Rail Maintenance Equipment	18.3	52.6	78.5	99.8	66.9	43.7	39.5	381.1
Bus Repair Equipment	5.1	2.3	3.8	3.8	4.5	5.0	5.0	24.4
Business Facilities Equipment	0.2	0.1	0.2	0.2	0.2	0.2	0.2	1.1
Subtotal	\$23.6	\$55.0	\$82.5	\$103.7	\$71.6	\$49.0	\$44.8	\$406.6
<b>H Other Facilities</b>								
Business Support Facilities	11.1	4.4	6.7	7.2	3.8	5.2	3.0	30.2
MTPD Support Facilities	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	0.0	1.2	1.2	1.2	1.2	1.2	1.2	7.2
Subtotal	\$13.3	\$5.6	\$7.9	\$8.4	\$5.0	\$6.4	\$4.2	\$37.4
<b>I Project Management and Support</b>								
Credit Facility	4.1	5.0	1.8	1.8	1.8	1.8	1.8	14.0
Planning	0.5	0.6	0.0	0.0	0.0	0.0	0.0	0.6
Project Management and Other	14.7	15.7	40.6	36.2	31.2	22.8	22.9	169.4
Subtotal	\$19.3	\$21.2	\$42.4	\$38.0	\$33.0	\$24.6	\$24.7	\$184.0
<b>Total</b>	<b>\$1,141.7</b>	<b>\$1,128.3</b>	<b>\$1,041.7</b>	<b>\$1,014.8</b>	<b>\$992.0</b>	<b>\$916.7</b>	<b>\$906.5</b>	<b>\$6,000.0</b>

## Capital Reimbursable Budget

Reimbursable capital projects are unique programs or projects sponsored or directed by jurisdictional partners. Separate funding has been provided by the project sponsor to support these projects. These projects are outside of the CFA and are not included within the base CIP discussed in this section. A full list of the proposed reimbursable Capital program can be found in Appendix A.

### Proposed FY2017 Budget for Capital Reimbursable Projects (dollars in millions)

	<b>FY2017</b>
<b>Virginia</b>	<b>\$152.9</b>
• Dulles Phase II	151.7
• Potomac Yard Alternative Analysis	0.2
• Project Development	1.0
<b>District of Columbia</b>	<b>\$1.8</b>
• Minnesota Avenue Parking Garage Repairs	0.7
• Project Development	1.1
<b>Maryland</b>	<b>\$4.8</b>
• MTA Purple Line Support	4.0
• Project Development	0.8
<b>All Jurisdictional and Other Partners</b>	<b>\$1.0</b>
• SmartTrip® Express Recharges	1.0
<b>Total</b>	<b>\$160.5</b>

FY2017-2022 Proposed Capital Improvement Program (CIP)  
Multi-Year CIP Investments: FY2011-2022  
(dollars in millions)

	FY2011-2015		FY2017 - FY2022 Plan						FY2011-22 Total
	Actuals	FY2016 Forecast	FY2017 Proposed	FY2018 Plan	FY2019 Plan	FY2020 Plan	FY2021 Plan	FY2022 Plan	
<b>A. Vehicles/Vehicle Parts</b>									
Replacement of Rail Cars									
CIP0057 1000 Series Rail Car Replacement	\$108.7	\$104.0	\$201.6	\$145.2	\$49.3	\$0.0	\$34.7	\$25.4	\$456.2
CIP0059 2000/3000 Series Rail Car Replacement	0.0	0.3	0.7	2.3	4.0	28.2	66.2	0.0	101.4
CIP0060 4000 Series Rail Car Replacement	22.7	0.0	0.0	13.2	174.4	20.4	0.0	18.9	226.9
CIP0068 Rail Car Acquisition (220 Railcars)	0.0	30.6	0.0	0.0	0.0	151.4	111.8	145.8	409.1
Subtotal	\$131.4	\$154.9	\$202.3	\$160.7	\$227.7	\$200.0	\$212.7	\$190.2	\$1,193.6
Replacement of Buses									
CIP0006 Bus Replacement	313.7	147.7	65.0	50.8	50.8	102.7	102.7	102.7	474.8
Subtotal	\$313.7	\$147.7	\$65.0	\$50.8	\$50.8	\$102.7	\$102.7	\$102.7	\$474.8
Rehabilitation of Rail Cars									
CIP0058 2000/3000 Series Rail Car Mid-Life Rehabilitation	7.9	0.3	0.0	0.0	0.0	0.0	0.0	0.0	8.3
CIP0061 5000 Series Rail Car Mid-Life Rehabilitation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIP0063 Railcar Rehabilitation Program	115.5	57.9	59.0	67.5	68.7	70.0	71.3	72.6	409.0
CIP0064 1000 Series Rail Car HVAC Rehabilitation	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.9
CIP0067 Rail Car Safety & Reliability Enhancements	24.6	2.8	7.8	3.9	3.9	3.9	3.9	3.9	27.5
CIP0125 Rail Preventive Maintenance	20.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.8
CIP0142 Rail Lifecycle Overhaul	101.3	20.5	61.0	19.3	19.9	20.5	21.1	21.7	163.5
CIP0148 Repair of Damaged Railcars	1.5	2.3	2.5	0.6	0.6	0.6	0.6	0.6	9.4
Subtotal	\$275.5	\$83.9	\$130.3	\$91.3	\$93.1	\$95.0	\$96.9	\$98.9	\$605.6
Rehabilitation of Buses									
CIP0005 Bus Rehabilitation Program	144.6	34.3	39.0	42.1	43.4	44.7	46.0	47.4	262.5
CIP0008 Bus Repairables	32.5	8.1	9.9	10.0	10.9	10.9	12.0	11.6	65.3
CIP0137 Bus Preventative Maintenance	11.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.4
CIP0143 Bus Lifecycle Overhaul	53.0	9.5	34.0	10.2	10.2	10.2	10.2	10.2	85.0
Subtotal	\$241.5	\$51.9	\$82.9	\$62.3	\$64.5	\$65.8	\$68.2	\$69.2	\$412.9
Replacement of Metro-Access Vehicles									
CIP0015 Metro-Access Fleet Acquisition	45.4	12.4	12.1	9.8	10.3	10.9	11.5	13.4	68.0
Subtotal	\$45.4	\$12.4	\$12.1	\$9.8	\$10.3	\$10.9	\$11.5	\$13.4	\$68.0

FY2017-2022 Proposed Capital Improvement Program (CIP)  
Multi-Year CIP Investments: FY2011-2022  
(dollars in millions)

	FY2017 - FY2022 Plan										FY2011-22 Total	
	FY2017 Proposed	FY2018 Plan	FY2019 Plan	FY2020 Plan	FY2021 Plan	FY2022 Plan	FY2022 Total	FY2017-22 Total				
Replacement of Service Vehicles												
CIP0009												
Service Vehicle Replacement & Leasing												
Subtotal	2.0	1.8	2.3	1.9	2.0	4.8	14.8	46.0				
CIP0009	\$2.0	\$1.8	\$2.3	\$1.9	\$2.0	\$4.8	\$14.8	\$46.0				
Rail Car Fleet Expansion												
CIP0062												
6000 Series Rail Car Procurement												
Subtotal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0				
CIP0062	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$10.0				
Bus Fleet Expansion												
CIP0003												
Bus Fleet Expansion												
Subtotal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.6				
CIP0003	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$14.6				
Bus Enhancements												
CIP0002												
Automatic Vehicle Location Equipment Replacement												
CIP0007												
Bus Camera Installation & Replacement												
Subtotal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.8				
CIP0002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.8				
CIP0007	3.1	2.6	3.6	3.4	3.6	3.6	19.9	24.2				
CIP0007	\$3.1	\$2.6	\$3.6	\$3.4	\$3.6	\$3.6	\$19.9	\$67.0				
Subtotal	\$497.7	\$379.3	\$452.4	\$479.7	\$497.6	\$482.8	\$2,789.6	\$4,350.8				
Subtotal	\$1,098.3	\$462.9										
B Rail System Infrastructure Rehabilitation												
Rail Line Segment Rehabilitation												
CIP0107												
Red Line Rehabilitation Stage One												
CIP0108												
Red Line Rehabilitation Stage Two												
CIP0110												
Orange/Blue Line Rehabilitation Stage One												
Subtotal	263.6	1.5	0.0	0.0	0.0	0.0	0.0	265.1				
CIP0107	0.0	0.0	0.0	0.0	0.0	0.0	0.0	265.1				
CIP0108	10.0	17.5	9.5	10.6	11.0	26.5	85.0	97.0				
CIP0110	59.5	28.0	0.0	0.0	0.0	0.0	0.0	423.0				
CIP0110	\$69.5	\$45.5	\$9.5	\$10.6	\$11.0	\$26.5	\$172.5	\$785.1				
Rail System Safety Rehabilitation												
CIP0139												
NTSB & SMI Recommendations												
CIP0256												
MSF Sprinkler System												
CIP0258												
Fire Alarm System Upgrade Project to meet NFPA72												
CIP0261												
Flood Remediation System Wide												
Subtotal	17.2	14.0	6.4	6.4	6.4	6.4	56.7	271.6				
CIP0139	17.2	14.0	6.4	6.4	6.4	6.4	56.7	271.6				
CIP0256	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
CIP0258	0.0	4.4	4.6	4.7	4.7	4.8	23.2	23.2				
CIP0261	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
CIP0261	\$17.2	\$18.4	\$10.9	\$11.1	\$11.1	\$11.2	\$79.9	\$294.8				
Subtotal	\$86.7	\$63.9	\$20.4	\$21.6	\$22.0	\$37.7	\$252.4	\$1,079.8				
Subtotal	\$709.4	\$118.0										

FY2017-2022 Proposed Capital Improvement Program (CIP)  
Multi-Year CIP Investments: FY2011-2022  
(dollars in millions)

	FY2017 - FY2022 Plan									
	FY2017 Proposed	FY2018 Plan	FY2019 Plan	FY2020 Plan	FY2021 Plan	FY2022 Plan	FY2017-22 Total	FY2011-22 Total		
<b>C Maintenance Facilities</b>										
Rehabilitation and Replacement of Bus Garages										
CIP0084 Southern Avenue Bus Garage Replacement	31.4	65.5	10.2	5.0	1.2	2.7	116.0	181.5		
CIP0085 Royal Street Bus Garage Replacement (Cinder Bed Road)	24.1	14.0	0.0	0.0	0.0	0.0	38.1	84.1		
CIP0086 Shepherd Parkway Bus Facility	6.1	3.3	0.0	0.0	0.0	0.0	9.3	12.0		
CIP0240 Bladensburg Garage	1.5	3.1	15.1	18.9	23.9	14.6	77.2	77.2		
Subtotal	\$63.0	\$88.8	\$25.4	\$23.9	\$23.2	\$17.3	\$240.5	\$354.7		
Maintenance of Bus Garages										
CIP0119 Bus Garage Facility Repairs	1.0	0.0	0.0	0.0	0.0	0.0	1.0	107.7		
CIP0263 CIF Fire Safety	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Subtotal	\$1.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$1.0	\$107.7		
Maintenance of Rail Yards										
CIP0116 Rail Yard Facility Repairs	31.2	15.6	0.0	0.0	0.0	0.0	46.8	168.9		
Subtotal	\$31.2	\$15.6	\$0.0	\$0.0	\$0.0	\$0.0	\$46.8	\$168.9		
Rail Maintenance Facilities										
CIP0071 Test Track & Railcar Commissioning Facility	4.5	0.0	0.0	0.0	0.0	0.0	4.5	99.1		
CIP0201 8-car Train Facility Design	2.6	0.0	0.0	0.0	0.0	0.0	2.6	2.6		
CIP0204 7000 Series Rail Car HVAC Maintenance Facility	3.2	0.0	0.0	0.0	0.0	0.0	3.2	5.5		
CIP0224 New Carrollton Yard Capacity Improvements	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4		
CIP0225 Railcar Heavy Repair and Overhaul Facility	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0		
CIP0231 Relocation of Maintenance Departments from Rail Yards	5.0	0.0	0.0	0.0	0.0	0.0	5.0	41.8		
Subtotal	\$12.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$12.7	\$152.4		
Environmental Compliance Projects										
CIP0010 Environmental Compliance Project	2.0	3.0	3.7	3.4	2.8	0.0	14.9	22.2		
CIP0011 Underground Storage Tank Replacement	2.3	5.9	4.3	5.9	5.0	4.2	27.5	43.0		
CIP0210 Pollution Prevention for Track Fueling Areas	2.1	2.6	3.2	4.9	2.9	2.7	18.3	19.4		
CIP0211 Storm Water Facility Assessment	1.2	3.4	3.4	3.4	3.1	3.0	17.6	19.1		
CIP0212 Sustainability Investments - Pilot Program	1.0	0.0	0.0	0.0	0.0	0.0	1.0	3.0		
Subtotal	\$8.6	\$14.8	\$14.6	\$17.7	\$13.7	\$9.9	\$79.3	\$106.8		

FY2017-2022 Proposed Capital Improvement Program (CIP)  
Multi-Year CIP Investments: FY2011-2022  
(dollars in millions)

	FY2017 - FY2022 Plan										FY2011-22 Total
	FY2017 Proposed	FY2018 Plan	FY2019 Plan	FY2020 Plan	FY2021 Plan	FY2022 Plan	FY2017-22 Total				
Maintenance Bus and Rail Facilities											
CIP0127 Support Equipment - MTPD	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	6.2
CIP0145 Rail Yard Hardening and Bus Security	1.7	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9
CIP0155 Rehabilitation of Backlick Road Facility CCTV Enhancement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5
CIP0213 8-Car Train Maintenance and Storage Facilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7
CIP0221 Bus Customer Facility Improvements	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5
Subtotal	\$3.9	\$1.3	\$1.0	\$1.0	\$1.0	\$1.0	\$1.0	\$1.0	\$1.0	\$1.0	\$71.0
Expansion of Bus Garages											
CIP0038 Future Bus Facilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
CIP0078 Bladensburg Bus Facility Rehabilitation & Reconfiguration	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.7
Subtotal	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$10.0
Subtotal	\$120.4	\$117.5	\$41.0	\$42.6	\$39.9	\$28.2	\$389.6	\$389.6	\$389.6	\$389.6	\$971.4
D Systems and Technology											
Power System Replacement/Upgrades - Rail											
CIP0076 Rail Power System Upgrades	17.5	25.9	26.3	24.8	12.9	42.5	150.0	150.0	150.0	150.0	220.4
CIP0077 8-Car Train Power Upgrades	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.4
CIP0223 8-Car Train Power Cable Upgrades	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.1
CIP0232 Automatic Train Control System Upgrades	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.1
CIP0251 Automatic Train Control State of Good Repair	14.5	19.8	21.0	23.8	22.3	21.5	123.0	123.0	123.0	123.0	130.8
CIP0232 AC Power Systems State of Good Repair	4.1	1.9	2.0	2.0	2.0	2.0	14.0	14.0	14.0	14.0	14.0
CIP0233 Traction Power State of Good Repair	21.0	7.9	7.7	7.7	7.8	7.8	74.2	74.2	74.2	74.2	74.2
CIP0237 Transformer Replacement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIP0259 MPR Relays	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIP0260 Coordination Study for all TPSS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIP0262 Surge Arrestors for TPSS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal	\$57.1	\$55.6	\$57.0	\$58.4	\$45.0	\$73.9	\$347.0	\$347.0	\$347.0	\$347.0	\$462.0

FY2017-2022 Proposed Capital Improvement Program (CIP)  
Multi-Year CIP Investments: FY2011-2022  
(dollars in millions)

	FY2011-2015		FY2017 - FY2022 Plan						FY2011-22
	Actuals	FY2016 Forecast	FY2017 Proposed	FY2018 Plan	FY2019 Plan	FY2020 Plan	FY2021 Plan	FY2022 Plan	Total
<b>Operations Support Software</b>									
CIP0042 Bus & Rail Asset Management Software	14.4	3.5	4.0	2.3	3.0	3.2	3.4	3.5	37.3
CIP0043 Bus Operations Support Software	9.0	1.0	4.0	2.7	1.4	1.6	1.6	1.6	23.0
CIP0044 IT Business Process Reengineering and Program Support	26.2	5.6	8.4	5.2	5.9	6.4	6.4	6.4	70.7
CIP0045 Data Centers and Infrastructures	28.4	5.4	4.0	2.8	3.3	5.0	2.7	2.7	54.1
CIP0047 Enterprise Geographic Information System	6.9	0.8	0.8	1.4	1.6	1.7	1.8	1.8	16.7
CIP0051 Police Dispatch and Records Management	7.2	2.7	1.1	1.3	1.4	1.5	1.5	1.5	18.4
CIP0052 Network and Communications	20.1	3.0	4.0	4.8	4.9	5.9	6.1	6.3	55.2
CIP0053 Metro Enterprise Monitoring Center (MEMC)	4.8	1.1	0.0	0.0	0.0	0.0	0.0	0.0	5.9
CIP0056 Rail Operations Support Software	11.3	2.3	3.5	3.4	3.7	4.4	4.4	4.4	37.4
CIP0128 Data Governance and Business Intelligence	5.1	1.0	0.9	0.9	0.9	0.9	1.0	1.0	11.7
CIP0140 Rail Mileage Based Asset Management	10.6	0.6	0.0	0.3	0.0	0.0	0.0	0.0	11.5
CIP0144 Bus Operations Control Center	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3
CIP0149 Transit Asset Management System	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.2
CIP0215 Rail Scheduling System Upgrade	1.0	1.5	2.2	1.3	0.0	0.0	0.0	0.0	6.1
<b>Subtotal</b>	<b>\$130.7</b>	<b>\$28.5</b>	<b>\$32.9</b>	<b>\$26.4</b>	<b>\$26.2</b>	<b>\$30.8</b>	<b>\$29.0</b>	<b>\$29.2</b>	<b>\$333.6</b>
<b>Business Support Software &amp; Equipment</b>									
CIP0030 Currency Processing Machines	2.3	0.7	0.0	0.6	0.6	0.0	1.8	0.0	6.0
CIP0046 Document Management System	11.4	1.8	1.0	2.4	2.5	1.5	2.0	1.5	24.1
CIP0048 Sensitive Data Protection Technology	19.4	1.2	1.3	1.2	1.3	1.5	1.5	1.5	29.0
CIP0049 Management Support Software	58.2	16.4	20.5	11.3	10.1	6.4	6.8	6.8	136.5
CIP0050 Metro IT One Stop and Office Automation	10.1	0.5	0.8	0.8	0.9	0.9	0.9	0.9	15.9
CIP0054 Customer Electronic Communications & Outreach	10.1	1.5	0.8	0.0	0.0	0.0	0.0	0.0	12.4
CIP0103 Police Portable Radio Replacement	2.0	0.9	0.9	0.9	0.1	0.0	0.0	0.0	4.8
CIP0147 FBI National Electronic Countermeasures Program	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
CIP0195 Radio Project - Additional Coverage	6.3	0.5	0.0	0.0	0.0	0.0	0.0	0.0	6.8
CIP0196 Safety Measurement System	8.6	2.9	0.0	5.3	4.0	1.8	7.0	3.0	32.7
CIP0202 Non-Revenue Vehicle Management System	0.3	0.7	0.0	0.0	0.0	0.0	0.0	0.0	1.0
CIP0230 Wireless Communication Infrastructure	0.9	1.6	2.2	0.8	0.0	0.0	0.0	0.0	5.5
CIP0255 New ID Badges Replacement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Subtotal</b>	<b>\$129.9</b>	<b>\$28.6</b>	<b>\$27.4</b>	<b>\$23.4</b>	<b>\$19.5</b>	<b>\$12.2</b>	<b>\$20.2</b>	<b>\$13.8</b>	<b>\$116.5</b>



FY2017-2022 Proposed Capital Improvement Program (CIP)  
Multi-Year CIP Investments: FY2011-2022  
(dollars in millions)

	FY2017 - FY2022 Plan										FY2011-22 Total	
	FY2017 Proposed	FY2018 Plan	FY2019 Plan	FY2020 Plan	FY2021 Plan	FY2022 Plan	FY2017-22 Total					
<b>Rail Fare Equipment</b>												
CIP0031 Debit/Credit Processing Requirements	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4
CIP0092 Ethernet Wiring for Rail Fare Machines	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.9
CIP0093 Integrating regional NEXTFARE System	0.4	0.5	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.8
CIP0094 Coin Collection Machines Improvements	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.5
CIP0097 New Electronic Payments Program	21.4	33.8	49.8	35.2	9.7	0.0	150.0	0.0	0.0	0.0	0.0	202.4
<b>Subtotal</b>	<b>\$21.8</b>	<b>\$34.3</b>	<b>\$49.9</b>	<b>\$35.4</b>	<b>\$9.7</b>	<b>\$0.0</b>	<b>\$151.2</b>					<b>\$242.2</b>
<b>Subtotal</b>	<b>\$139.2</b>	<b>\$139.7</b>	<b>\$152.6</b>	<b>\$136.7</b>	<b>\$104.0</b>	<b>\$116.9</b>	<b>\$789.1</b>					<b>\$1,332.9</b>
<b>E Track and Structures</b>												
<b>Track Rehabilitation</b>												
CIP0018 Track Welding Program	6.5	7.5	7.7	8.0	7.6	9.5	46.9					66.6
CIP0019 Track Floating Slab Rehabilitation	0.0	0.0	0.0	0.0	0.0	0.0	0.0					6.2
CIP0021 Track Grout Pad Rehabilitation	2.8	3.9	4.1	4.3	4.5	4.8	24.4					40.1
CIP0022 Track Structural Rehabilitation	2.1	6.3	6.6	6.9	7.2	7.6	36.6					51.6
CIP0023 Third Rail Rehabilitation and Replacement	6.1	6.9	7.2	7.6	8.0	8.4	44.1					68.4
CIP0024 Track Rehabilitation	48.4	49.8	51.4	53.0	54.7	56.0	313.4					593.7
CIP0089 Track Fasteners	0.0	0.0	0.0	0.0	0.0	0.0	0.0					7.5
CIP0141 Cheverly Abutment	0.0	0.0	0.0	0.0	0.0	0.0	0.0					7.9
CIP0146 Switch Replacement Program	0.0	0.0	0.0	0.0	0.0	0.0	0.0					15.0
CIP0205 Bush Hill Aerial Structure Rehabilitation	4.6	1.8	0.0	0.0	0.0	0.0	6.4					7.5
CIP0264 Structural Rehab	0.0	0.0	0.0	0.0	0.0	0.0	0.0					0.0
<b>Subtotal</b>	<b>\$70.5</b>	<b>\$76.1</b>	<b>\$77.0</b>	<b>\$79.8</b>	<b>\$82.1</b>	<b>\$86.3</b>	<b>\$471.7</b>					<b>\$864.5</b>
<b>Station/Tunnel Rehabilitation</b>												
CIP0026 Station/Tunnel Leak Mitigation	7.1	10.0	8.6	9.1	9.6	10.8	55.3					77.3
<b>Subtotal</b>	<b>\$7.1</b>	<b>\$10.0</b>	<b>\$8.6</b>	<b>\$9.1</b>	<b>\$9.6</b>	<b>\$10.8</b>	<b>\$55.3</b>					<b>\$77.3</b>
<b>Subtotal</b>	<b>\$77.6</b>	<b>\$86.1</b>	<b>\$85.6</b>	<b>\$88.9</b>	<b>\$91.6</b>	<b>\$97.1</b>	<b>\$527.0</b>					<b>\$941.8</b>

FY2017-2022 Proposed Capital Improvement Program (CIP)  
Multi-Year CIP Investments: FY2011-2022  
(dollars in millions)

	FY2017 - FY2022 Plan						FY2011-22 Total
	FY2017 Proposed	FY2018 Plan	FY2019 Plan	FY2020 Plan	FY2021 Plan	FY2022 Plan	
<b>F Passenger Facilities</b>							
Elevator/ Escalator Facilities							
CIP0072 Elevator Rehabilitation	6.6	4.7	7.4	7.7	8.0	8.3	42.8
CIP0073 Escalator Rehabilitation	12.4	10.4	12.0	12.4	12.8	13.4	73.4
CIP0132 Elevator Escalator Repairables	5.7	3.9	6.1	6.3	6.5	6.8	37.4
CIP0185 Escalator Replacement	27.8	34.9	34.9	35.9	0.0	0.0	209.7
Subtotal	\$52.6	\$55.9	\$60.5	\$62.3	\$27.3	\$28.5	\$497.6
<b>Maintenance of Rail Station Facilities</b>							
CIP0087 Station Rehabilitation Program	10.9	11.8	11.8	11.8	11.8	11.8	69.9
CIP0138 System-wide Infrastructure Rehabilitation	0.0	0.0	0.0	0.0	0.0	0.0	174.7
CIP0150 Fire Systems	7.2	4.6	0.0	0.0	0.0	0.0	37.4
CIP0151 Station Cooling Program	4.1	5.1	7.0	10.8	8.6	6.6	78.1
CIP0152 Parking Garage Rehabilitation	5.8	5.4	4.3	6.6	8.5	11.0	60.2
CIP0153 Accessible Station Signage	0.0	0.1	0.1	0.1	0.1	0.1	0.7
CIP0198 Platform to Mezzanine Stairs – Bethesda Station	0.0	0.0	0.0	0.0	0.0	0.0	0.5
CIP0199 Station & Right-of-Way Improvements	0.0	0.0	0.0	0.0	0.0	0.0	5.6
CIP0216 Farragut North Beam Rehabilitation	8.9	3.0	0.0	0.0	0.0	0.0	14.0
CIP0241 Raising Vent Shafts Vicinity Federal Triangle & Protecting System Core	10.3	5.8	0.0	0.0	0.0	0.0	16.1
CIP0242 Improving Drainage	6.0	1.4	1.2	0.8	0.6	0.0	11.1
Subtotal	\$53.3	\$37.2	\$24.3	\$30.0	\$29.5	\$29.5	\$203.9
<b>Bicycle &amp; Pedestrian Facilities</b>							
CIP0035 Bicycle & Pedestrian Facilities: Capacity Improvements	2.4	3.3	3.6	3.6	3.6	3.6	19.9
Subtotal	\$2.4	\$3.3	\$3.6	\$3.6	\$3.6	\$3.6	\$19.9
<b>Rail Station: Capacity Enhancements</b>							
CIP0017 Station Platform Safety Improvement (Truncated Domes)	0.0	0.0	0.0	0.0	0.0	0.0	4.6
CIP0039 Core & System Capacity Project Development	0.8	0.0	0.0	0.0	0.0	0.0	10.4
CIP0074 Parking Access and Collection Equipment Maintenance	0.0	0.0	0.0	0.0	0.0	0.0	11.0
CIP0088 Station Entrance Canopies	6.8	14.7	16.0	8.3	12.5	0.0	63.0
CIP0178 Union Station Access & Capacity Improvements	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIP0179 Gallery Place Access & Capacity Improvements	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIP0218 Station Upgrades	0.0	0.0	0.0	0.0	0.0	0.0	0.5
CIP0219 Station Lighting Improvements	6.4	3.5	8.2	8.3	8.4	8.4	43.1
Subtotal	\$13.9	\$18.2	\$24.2	\$16.6	\$20.9	\$8.4	\$102.1
<b>Actuals</b>							
FY2011-2015	23.6	8.7					
FY2016 Forecast	57.0	10.7					
Subtotal	\$80.6	\$19.4					



**FY2017-2022 Proposed Capital Improvement Program (CIP)  
Multi-Year CIP Investments: FY2011-2022**  
(dollars in millions)

	FY2017 - FY2022 Plan										FY2011-22 Total	
	FY2017 Proposed	FY2018 Plan	FY2019 Plan	FY2020 Plan	FY2021 Plan	FY2022 Plan	FY2017-22 Total		FY2017-22 Total			
<b>H Other Facilities</b>												
Business Support Facilities												
CIP0033 Revenue Facility Equipment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7
CIP0034 Revenue Collection Facility	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4
CIP0080 Building Infrastructure & Systems Renewal	0.0	2.6	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.3
CIP0170 Roof Rehabilitation and Replacement	3.5	4.0	4.5	3.8	5.2	3.0	24.0	0.0	0.0	0.0	0.0	28.4
CIP0197 Rehabilitation of Non-Revenue Facilities	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2
CIP0206 Carmen Turner Facility Electrical Distribution Upgrade	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.8
Subtotal	\$4.4	\$6.7	\$7.2	\$3.8	\$5.2	\$3.0	\$30.2	\$0.0	\$0.0	\$0.0	\$0.0	\$70.9
M/ITPD Support Facilities												
CIP0101 Police Substation - New District 2 Training Facility	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.9
CIP0102 Police Substation (Northern Virginia)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIP0106 Special Operations Division Facility	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.6
Subtotal	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$60.5
Other												
CIP0247 Emergency Construction	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	7.2
Subtotal	\$1.2	\$1.2	\$1.2	\$1.2	\$1.2	\$1.2	\$7.2	\$1.2	\$1.2	\$1.2	\$1.2	\$7.2
Subtotal	\$5.6	\$7.9	\$8.4	\$5.0	\$6.4	\$4.2	\$37.4	\$0.0	\$0.0	\$0.0	\$0.0	\$138.5
<b>I Project Management and Support</b>												
Credit Facility												
CIP0131 Credit Facility	5.0	1.8	1.8	1.8	1.8	1.8	14.0	0.0	0.0	0.0	0.0	26.2
Subtotal	\$5.0	\$1.8	\$1.8	\$1.8	\$1.8	\$1.8	\$14.0	\$0.0	\$0.0	\$0.0	\$0.0	\$26.2
Planning												
CIP0220 Bus Planning	0.6	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	1.2
Subtotal	\$0.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.6	\$0.0	\$0.0	\$0.0	\$0.0	\$1.2
Project Management and Other												
CIP0126 Financial Planning, Project Admin. & System Wide Infrastructure Upgrades	12.2	3.1	2.3	2.3	0.0	0.0	20.0	0.0	0.0	0.0	0.0	68.2
CIP0246 General Engineering	1.5	0.0	0.0	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0	2.5
CIP0266 New Project - Asset Condition Assessment to drive CNI	2.0	3.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0	5.0
CIP0267 Contingency	0.0	34.5	33.9	28.9	22.8	22.9	142.9	0.0	0.0	0.0	0.0	142.9
Subtotal	\$15.7	\$40.6	\$36.2	\$31.2	\$22.8	\$22.9	\$169.4	\$0.0	\$0.0	\$0.0	\$0.0	\$218.6
Subtotal	\$21.2	\$42.4	\$38.0	\$33.0	\$24.6	\$24.7	\$184.0	\$0.0	\$0.0	\$0.0	\$0.0	\$246.0
<b>Total</b>	<b>\$</b>	<b>\$1,128.3</b>	<b>\$1,041.7</b>	<b>\$1,014.8</b>	<b>\$992.0</b>	<b>\$906.5</b>	<b>\$6,000.0</b>	<b>\$0.0</b>	<b>\$916.7</b>	<b>\$906.5</b>	<b>\$0.0</b>	<b>\$10,868.4</b>

## WMATA FY2017 Capital Project Summary

### CIP0004 Bus Repair Equipment

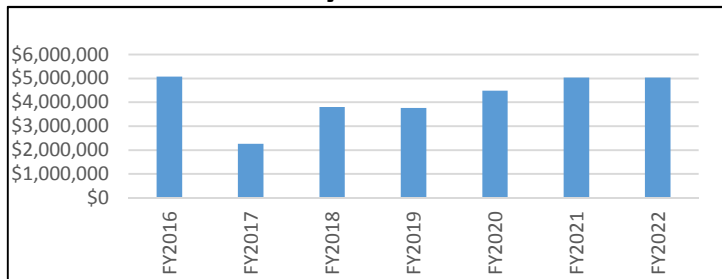
#### Project Description

This project replaces existing equipment that is past its useful life and provides new equipment for the repair and maintenance of the Bus and non-revenue fleets. Examples include, but are not limited to: forklifts, bus lifts, battery charging equipment, bus parts washers, diagnostic carts, engineering software and tools, welding tools, fall protection, and specialized training equipment. Additionally, this project supports minor construction for renovation and garage enhancements as needed.

#### Deliverables

- 1) FY2016 planned replacement of Portable lifts, Toolboxes, Forklifts, Floor scrubbers etc.
- 2) FY2016 begin CTF Upgrades, total - \$3.6m. Project to span over 3yrs. FY2016 - FY2018
- 3) Improvements to include: Flooring upgrade - \$1.3m, Ventilation upgrade - \$723k, Lighting repairs \$650k
- 4) Fleetwatch Improvements/upgrades to begin January 2016

#### Financial Summary



#### Milestones

- 1) Toolbox procurement contract awarded December 2015, 4yrs of options to complete in FY2019
- 2) Fleetwatch Improvement to be completed in September 2016

#### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 - FY2022	
									FY2016 - FY2022	FY2011 - FY2022
Personnel	597	320	100	164	169	132	135	140	1,159	1,756
Non-Personnel	14,001	4,752	2,158	3,634	3,588	4,357	4,898	4,898	28,284	42,286
<b>Total Budget</b>	<b>14,598</b>	<b>5,072</b>	<b>2,258</b>	<b>3,798</b>	<b>3,757</b>	<b>4,488</b>	<b>5,033</b>	<b>5,037</b>	<b>29,444</b>	<b>44,042</b>

#### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
Federal Formula	2,258	18,320	19,704
<b>Total</b>	<b>2,258</b>		

#### Variance Analysis

Annual recurring fund, planned activities based upon lifecycle of equipment. Additional investment in facility improvements

## WMATA FY2017 Capital Project Summary CIP0005 Bus Rehabilitation Program

### Project Description

The Bus Rehabilitation Program is a commitment to proactive maintenance, maximizes capital investments and is comprised of six programs performed by WMATA employees at two major maintenance facilities. Under this project, a comprehensive rehabilitation program is performed, at approximately 7.5 years of age and provides for the complete rehabilitation of bus mechanical, electrical and structural systems. Additionally, this CIP supports rebuilding of major components and sub-components. This fleet improvement project enhances overall safety, reliability and performance.

### Deliverables

- 1) FY2017 planned Rehab of 100 coaches
- 2) Rebuild of Engines, Transmissions, Axles and other major components
- 3) Starting FY2016, Electrical Storage System (ESS) and Dual Power Inverter Modules (DPIM) replacement on 450 coaches over the next five years

### Financial Summary



### Milestones

- 1) FY2017 - 90 Electric Storage Systems (ESS) and Dual Power Inverter Modules (DPIM) units to be replaced
- 2) FY2017 Fleet Improvements to include: R22 refrigerant conversion, Emissions testing & repair, ongoing Axle and Brake testing

### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	82,141	19,446	22,766	24,778	25,623	26,497	27,402	28,337	174,849	256,989
Non-Personnel	62,432	14,872	16,234	17,329	17,745	18,170	18,604	19,048	122,002	184,434
<b>Total Budget</b>	<b>144,573</b>	<b>34,318</b>	<b>39,000</b>	<b>42,106</b>	<b>43,368</b>	<b>44,667</b>	<b>46,006</b>	<b>47,384</b>	<b>296,850</b>	<b>441,423</b>

### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
Federal Formula	39,000	182,273	178,986
<b>Total</b>	<b>39,000</b>		

### Variance Analysis

Annual recurring program with planned activities based upon lifecycle of equipment. In future years, ESS and DPIM replacement may increase overall cost

## WMATA FY2017 Capital Project Summary CIP0006 Bus Replacement

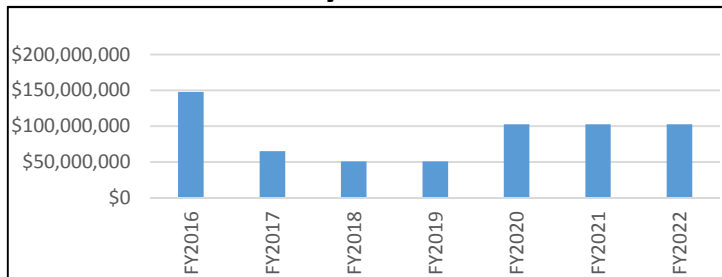
### Project Description

This project replaces an average of 100 buses per year in order to maintain an average fleet age of 7.5 years. This is based on a fleet size of approximately 1,500 buses that range in size from 26 to 62 feet. Metro will continue to procure buses that utilize clean fuel technologies to reduce emissions and lower fuel costs. This project supports Metro's long term goal of a fleet composition of 50 percent hybrid/electric diesel and 50 percent Compressed Natural Gas (CNG).

### Deliverables

- 1) December 2015 all 21 Articulated coaches delivered
- 2) June 2016 - 90 of 164 CNG coaches delivered
- 3) June 2016 - 56 Diesel Hybrid coaches delivered

### Financial Summary



### Milestones

- 1) October 2016 Delivery completed, 24 Hybrid Electric Diesel coaches
- 2) December 2016 Delivery completed, 74 CNG coaches
- 3) FY2017 Spare parts expenditures - \$7.6m

### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	4,323	8,036	722	478	494	1,024	1,054	1,086	12,893	17,216
Non-Personnel	309,422	139,624	64,278	50,331	50,315	101,712	101,682	101,642	609,582	919,004
<b>Total Budget</b>	<b>313,745</b>	<b>147,660</b>	<b>65,000</b>	<b>50,808</b>	<b>50,808</b>	<b>102,735</b>	<b>102,736</b>	<b>102,728</b>	<b>622,476</b>	<b>936,220</b>

### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
Federal Formula	47,276	442,894	461,404
Bus Grant	12,000		
CMAQ	800		
Debt	4,924		
<b>Total</b>	<b>65,000</b>		

### Variance Analysis

Change in payment structure accelerated mobilization payments when exercising contract options.

## WMATA FY2017 Capital Project Summary

### CIP0007 Bus Camera Installation & Replacement

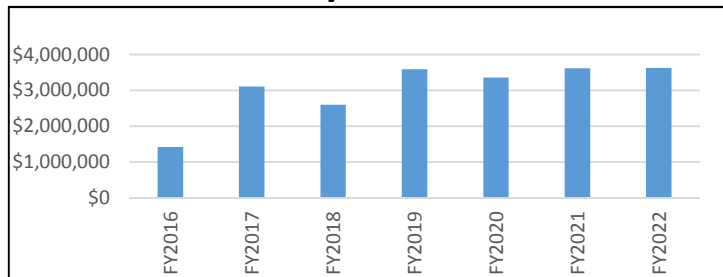
#### Project Description

This project provides for the scheduled replacement of the closed-circuit television (CCTV) system onboard all buses, the necessary support equipment and IT infrastructure systems. Camera systems reduce the detrimental impact of fraudulent claims and vandalism, deter crime, assist in criminal prosecutions and help employees resolve customer concerns and complaints. The WMATA fleet are equipped with a CCTV system which has a useful life of 7 years.

#### Deliverables

- 1) November 2015 - 2 month technical evaluation in progress
- 2) Notice to proceed January 2016

#### Financial Summary



#### Milestones

- 1) Contract award expected January 2016
- 2) Installation to begin February 2016

#### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	0	179	308	266	417	401	445	458	2,473	2,473
Non-Personnel	2,918	1,241	2,800	2,334	3,177	2,958	3,170	3,170	18,850	21,768
<b>Total Budget</b>	<b>2,918</b>	<b>1,420</b>	<b>3,108</b>	<b>2,600</b>	<b>3,594</b>	<b>3,359</b>	<b>3,614</b>	<b>3,627</b>	<b>21,323</b>	<b>24,241</b>

#### Planned Funding Sources

As of 12/16/2015	FY2017
Federal Formula	3,108
<b>Total</b>	<b>3,108</b>

Original FY11-FY16 Cost	Current FY11 - FY16 Cost
3,006	4,341

#### Variance Analysis

Additional costs incurred for software upgrades and integration costs



## WMATA FY2017 Capital Project Summary

### CIP0008 Bus Repairables

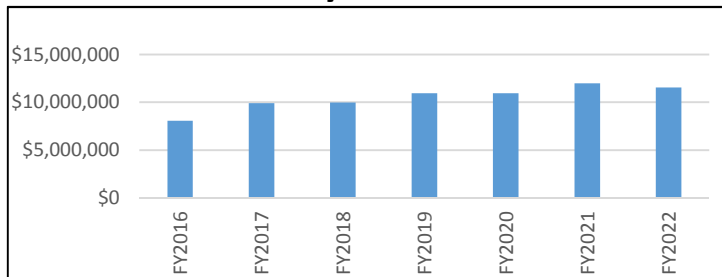
#### Project Description

This project provides for Bus components that have reached the end of their useful life and cannot be overhauled. The components have a value of \$500 or greater and a useful life of at least one year, including but not limited to: Cylinder Heads, A/C Compressors, Turbo Assemblies, Accumulators, Transmission Valve Bodies, etc.. These purchases are used to replenish inventory and add new parts as required to keep the bus fleet in a state of good repair.

#### Deliverables

- 1) Conversion from simplified acquisition protocol to contract process for select items
- 2) Acquisition of : Allison Gen IV Transmission Housings, Cummins Front Cover Assemblies, Hyrdaulic Pumps, ThermoKing Condensor units etc.

#### Financial Summary



#### Milestones

- 1) Annual recurring program to support the State of Good Repair of Bus fleet

#### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	326	384	0	0	0	0	0	0	384	710
Non-Personnel	32,170	7,671	9,900	9,989	10,940	10,940	11,986	11,566	72,991	105,161
<b>Total Budget</b>	<b>32,496</b>	<b>8,054</b>	<b>9,900</b>	<b>9,989</b>	<b>10,940</b>	<b>10,940</b>	<b>11,986</b>	<b>11,566</b>	<b>73,374</b>	<b>105,870</b>

#### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
Federal Formula	9,900	71,172	40,683
<b>Total</b>	<b>9,900</b>		

#### Variance Analysis

This CIP experienced budget reduction due to extended warranty coverage and increased longevity of components

## WMATA FY2017 Capital Project Summary

### CIP0009 Service Vehicle Replacement & Leasing

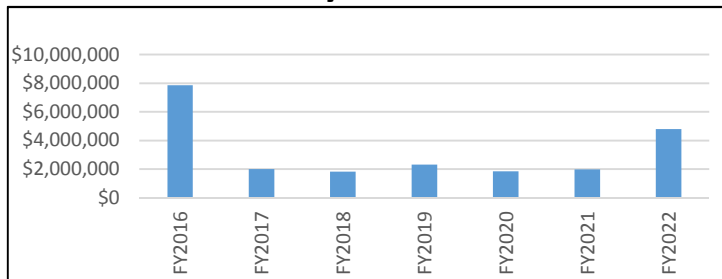
#### Project Description

This project funds the replacement of non-revenue service vehicles at the end of their useful life and funds lease agreements for service vehicles. Service vehicles are used in critical maintenance and law enforcement functions. The current replacement standard is 100,000 miles or 8 years for a vehicle used in light duty service, 100,000 miles or 12 years on heavy duty vehicles, and 100,000 miles or 5 years on law enforcement vehicles. These standards were established based on a 2013 evaluation to improve the efficiency of the support fleet.

#### Deliverables

- 1) \$2.5m of Police vehicle replacement
- 2) Replacement of various Heavy Duty and special purpose vehicles

#### Financial Summary



#### Milestones

- 1) September 2016 Police vehicle delivery complete

#### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	334	405	9	8	11	9	9	21	472	805
Non-Personnel	22,998	7,455	1,991	1,831	2,311	1,853	1,980	4,782	22,202	45,200
<b>Total Budget</b>	<b>23,331</b>	<b>7,859</b>	<b>2,000</b>	<b>1,839</b>	<b>2,322</b>	<b>1,862</b>	<b>1,988</b>	<b>4,803</b>	<b>22,673</b>	<b>46,005</b>

#### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
Federal Formula	2,000	37,472	31,095
<b>Total</b>	<b>2,000</b>		

#### Variance Analysis

In FY2013, vehicle useful service life extended based upon fleet evaluation study

## WMATA FY2017 Capital Project Summary CIP0010 Environmental Compliance Project

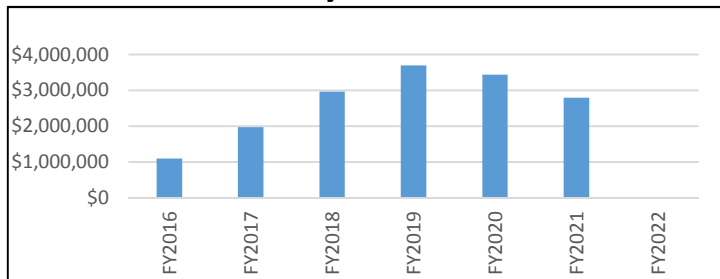
### Project Description

This project designs and constructs upgrades and/or replaces equipment and facilities in order to maintain compliance with environmental regulations, to respond to directives from environmental regulatory agencies, to minimize risk, civil and criminal citations and fines. The scope of this project includes, but is not limited to, storage tank systems, tank monitoring systems, wastewater pretreatment systems, storm water pretreatment systems, remediation systems and air emission sources.

### Deliverables

- 1) Upgrade pretreatment system at Huntington October 2016
- 2) Replace Oil Water Separator (OWS) bypass for cleaning at Oliver Street Discharge Pumping Station (DPS) January 2017
- 3) Repair OWS at the Revenue Collection Facility (RCF) in Alexandria (June 2017). Upgrade pretreatment system at Carmen Turner Facility (CTF) December 2016

### Financial Summary



### Milestones

- 1) Contract for future years scheduled to be awarded late FY2016. Construction to begin Q2 FY2017

### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	1,266	339	718	797	846	930	896	0	4,526	5,793
Non-Personnel	5,012	761	1,252	2,166	2,852	2,511	1,903	0	11,444	16,456
<b>Total Budget</b>	<b>6,279</b>	<b>1,100</b>	<b>1,970</b>	<b>2,963</b>	<b>3,698</b>	<b>3,441</b>	<b>2,799</b>	<b>0</b>	<b>15,970</b>	<b>22,249</b>

### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
Federal Formula	1,970	4,285	7,388
<b>Total</b>	<b>1,970</b>		

### Variance Analysis

Original tank matrix and estimates were completed in 2008, with no formal design work. Long term forecasts were refined, additional scope added

## WMATA FY2017 Capital Project Summary

### CIP0011 Underground Storage Tank Replacement

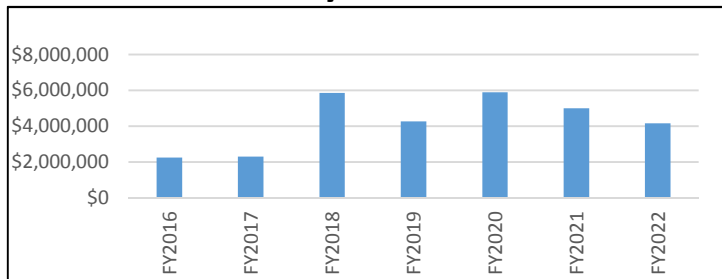
#### Project Description

This project designs and constructs the replacement of underground storage tank (UST) systems, above ground storage tank (AST) systems and tank monitoring systems at or near the end of their warranty periods. In addition, this project rehabilitates the tank systems that are at mid-life to minimize potential liabilities.

#### Deliverables

- 1) Remove Service Vehicle Maintenance tanks and abandon monitoring wells at Carmen Turner Facility September 2016. New contract for Forest Glen
- 2) Replace 4 Underground Storage Tanks (USTs), 3 Above Ground Storage Tanks (ASTs). New contract for Forest Glen
- 3) Replace used oil AST at West Falls Church December 2016
- 4) Replace used oil AST at Shady Grove (June 2017). Install Diesel Exhaust Fluid (DEF) tank at Alexandria September 2017

#### Financial Summary



#### Milestones

- 1) Forest Glen contract to be issued in FY2017

#### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 - FY2022	
									FY2016 - FY2022	FY2011 - FY2022
Personnel	1,720	491	236	542	355	529	539	538	3,230	4,951
Non-Personnel	11,503	1,761	2,074	5,319	3,906	5,374	4,455	3,631	26,521	38,024
<b>Total Budget</b>	<b>13,224</b>	<b>2,252</b>	<b>2,310</b>	<b>5,862</b>	<b>4,262</b>	<b>5,903</b>	<b>4,994</b>	<b>4,169</b>	<b>29,751</b>	<b>42,975</b>

#### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
State of Good Repair	2,310	15,435	15,479
<b>Total</b>	<b>2,310</b>		

#### Variance Analysis

No significant change.

## WMATA FY2017 Capital Project Summary CIP0015 MetroAccess Fleet Acquisition

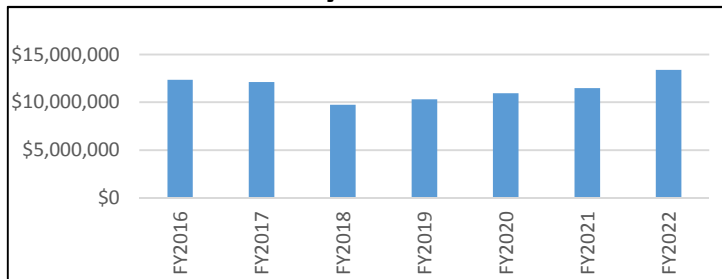
### Project Description

Vehicles in the paratransit fleet which have reached or exceeded their useful life will be replaced each year to maintain an average fleet age of 4 years, maximizing fleet safety, reliability and quality of service delivered in-line with projected ridership.

### Deliverables

1) Contract and Procure One Hundred Seventy Five (175) Metro Access Paratransit Vans in FY2017

### Financial Summary



### Milestones

- 1) Award Contract - September 2016
- 2) Pilot Vehicle Production - November 2016, First Article Inspection - December 2016
- 3) Production of Vehicles - February 2017, Delivery of Vehicles Complete - June 2017

### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	1,036	804	706	483	498	513	528	544	4,075	5,111
Non-Personnel	44,408	11,565	11,405	9,275	9,822	10,422	10,968	12,837	76,294	120,702
<b>Total Budget</b>	<b>45,444</b>	<b>12,369</b>	<b>12,111</b>	<b>9,758</b>	<b>10,320</b>	<b>10,935</b>	<b>11,496</b>	<b>13,380</b>	<b>80,369</b>	<b>125,812</b>

### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
Debt	12,111	65,379	57,874
<b>Total</b>	<b>12,111</b>		

### Variance Analysis

Acquisition delays have caused expenditures to shift into later years

## WMATA FY2017 Capital Project Summary CIP0018 Joint Elimination Program

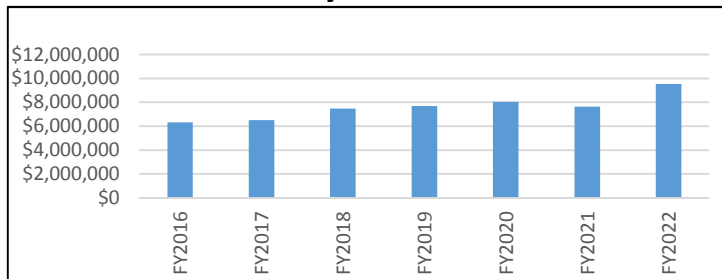
### Project Description

This ongoing project improves the electrical and signal conductivity of running rails, eliminates rail joint defects, reduces noise and minimizes rail wear. It also reduces maintenance and inspection costs by decreasing the number of open rail joints throughout the rail system. Currently there are approximately 2,000 open rail joints system wide. As a result of running rail replacement, approximately 1,000 new open joints are created each year. Thermite welding is also performed in areas where it is not practical to use flash butt welding equipment.

### Deliverables

1) Procure welding services contracts and specialized equipment to eliminate approximately 1,200 joints annually. This project is addressing wide-gauge track, which has negatively impacted the schedule of planned track welding work.

### Financial Summary



### Milestones

1) This is an on-going program with an annual goal of 1,200 joints welded

### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	8,954	3,815	4,144	4,770	5,003	5,248	5,397	5,780	34,157	43,111
Non-Personnel	4,484	2,498	2,356	2,691	2,699	2,780	2,248	3,745	19,017	23,501
<b>Total Budget</b>	<b>13,438</b>	<b>6,313</b>	<b>6,500</b>	<b>7,461</b>	<b>7,702</b>	<b>8,028</b>	<b>7,645</b>	<b>9,525</b>	<b>53,174</b>	<b>66,611</b>

### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
PRIIA	6,500	16,942	19,869
<b>Total</b>	<b>6,500</b>		

### Variance Analysis

An additional work crew was added to reduce backlog and increase production

## WMATA FY2017 Capital Project Summary

### CIP0020 Replacement of Rail Track Signage

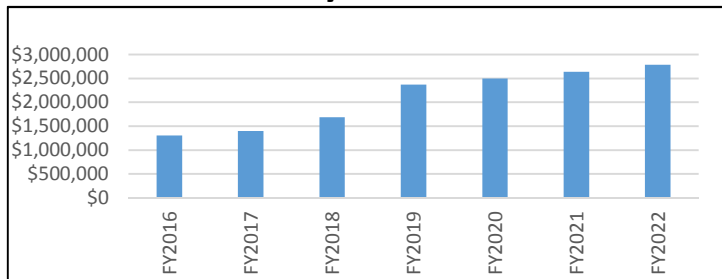
#### Project Description

This project replaces old, illegible roadway track signs and various other graphics indicating locations and warnings to employees, emergency responders and the general public. Track graphics are essential for safe operations and emergency response. Additionally, Roadway signage requires replacement when damaged or deteriorated. The roadway graphic signs are system-wide (on the roadway fence, chain markers, warning signs on tunnel vent shaft doors, third rail power warning signs, track identification signs, etc.).

#### Deliverables

1) Replace 1,500 Roadway signs annually

#### Financial Summary



#### Milestones

1) This is an on-going program with an annual goal of 1,500 roadway signs replaced

#### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	4,835	1,148	1,250	1,506	2,182	2,304	2,432	2,568	13,390	18,225
Non-Personnel	318	160	149	179	188	197	207	218	1,299	1,617
<b>Total Budget</b>	<b>5,153</b>	<b>1,308</b>	<b>1,399</b>	<b>1,685</b>	<b>2,370</b>	<b>2,501</b>	<b>2,639</b>	<b>2,786</b>	<b>14,689</b>	<b>19,842</b>

#### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
PRIIA	1,399	6,854	6,576
<b>Total</b>	<b>1,399</b>		

#### Variance Analysis

No significant change.

## WMATA FY2017 Capital Project Summary CIP0021 Track Grout Pad Rehabilitation

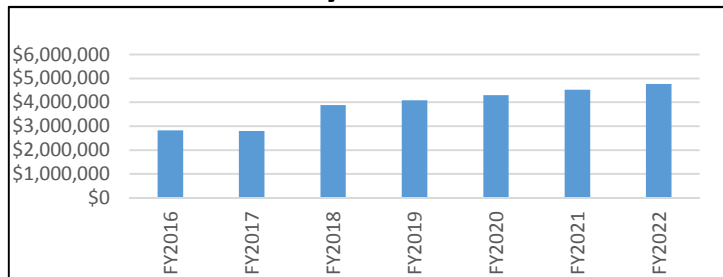
### Project Description

This project rehabilitates the grout pads that support the track structure. Metro has an inventory of approximately 160 miles (844,800 linear feet) of grout pads. Sections of track structure often require rehabilitation in conjunction with new fasteners, switches and switch machines. Grout pads on aerial structures and outside locations are repaired from spring through fall, while grout pads are repaired in tunnels during the winter months. The grout pads provide elevation and support for the running rails and are the main support for the rail fasteners, which maintain track geometry, cross-level and gauge.

### Deliverables

1) Replace 8,000 linear feet of grout pads annually and procure cement material

### Financial Summary



### Milestones

1) This is an on-going program with an annual goal of 8,000 linear feet of grout pads replacement

### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	11,830	2,729	2,723	3,773	3,970	4,178	4,398	4,631	26,403	38,232
Non-Personnel	1,023	99	82	113	119	125	131	138	806	1,829
<b>Total Budget</b>	<b>12,853</b>	<b>2,828</b>	<b>2,805</b>	<b>3,886</b>	<b>4,089</b>	<b>4,303</b>	<b>4,529</b>	<b>4,768</b>	<b>27,208</b>	<b>40,061</b>

### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
PRIIA	2,805	15,716	15,682
<b>Total</b>	<b>2,805</b>		

### Variance Analysis

No significant change.



## WMATA FY2017 Capital Project Summary CIP0022 Track Structural Rehabilitation

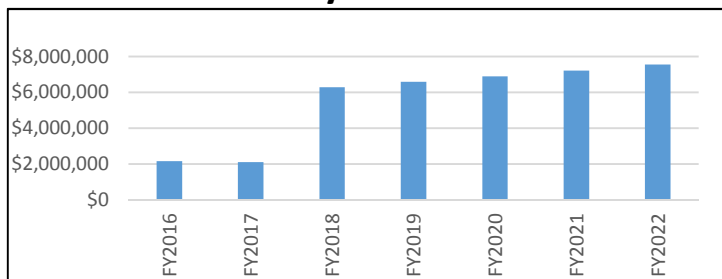
### Project Description

This project rehabilitates structural components and restores elevated platforms, bridges and retaining walls to designed load carrying capacity. The goals are based on annual inspections and critical engineering assessments, as the loss of one of these structures could affect an entire Metrorail line segment.

### Deliverables

- 1) Torque 500 bolts annually. Rehabilitate 1,200 square feet of concrete
- 2) Replace 800 deck joints annually

### Financial Summary



### Milestones

- 1) This is an on-going program to replace 800 deck joints, torque 500 bolts and rehabilitate 1,200 square feet of concrete. In FY2018 the scope of work and deliverables will increase considerably due to expanded project goals and an increase of workforce due to a second team being implemented

### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 - FY2011 - FY2022	
									FY2016 - FY2022	FY2011 - FY2022
Personnel	8,299	1,960	1,935	5,798	6,066	6,348	6,643	6,955	35,704	44,004
Non-Personnel	4,482	198	164	493	518	544	571	600	3,089	7,571
<b>Total Budget</b>	<b>12,781</b>	<b>2,158</b>	<b>2,099</b>	<b>6,292</b>	<b>6,584</b>	<b>6,892</b>	<b>7,215</b>	<b>7,554</b>	<b>38,793</b>	<b>51,575</b>

### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
PRIIA	2,099	12,268	15,006
<b>Total</b>	<b>2,099</b>		

### Variance Analysis

Increase in both labor and materials to deliver additional scope have resulted in higher costs

## WMATA FY2017 Capital Project Summary

### CIP0023 Third Rail Rehabilitation and Replacement

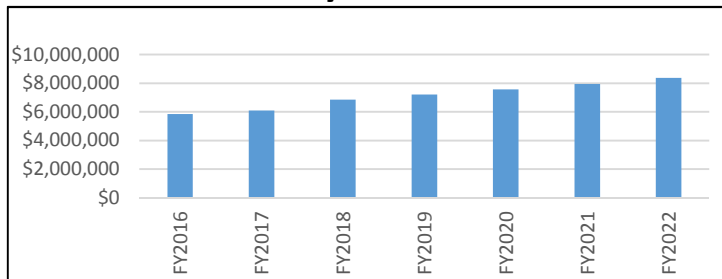
#### Project Description

This project replaces the original steel third rail with new aluminum and steel composite third rail, which is necessary to improve electrical current flow for increased revenue service. Composite third rail also reduces stray electrical current which contributes to deterioration of track and third rail components.

#### Deliverables

1) Procure and replace 5-miles of steel third rail with composite third-rail

#### Financial Summary



#### Milestones

1) This is an on-going program to replace steel third rail with composite

#### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	8,075	2,976	3,093	3,395	3,572	3,760	3,958	4,168	24,923	32,998
Non-Personnel	10,442	2,874	3,010	3,455	3,628	3,810	4,000	4,200	24,977	35,419
<b>Total Budget</b>	<b>18,517</b>	<b>5,850</b>	<b>6,103</b>	<b>6,850</b>	<b>7,201</b>	<b>7,570</b>	<b>7,959</b>	<b>8,368</b>	<b>49,900</b>	<b>68,417</b>

#### Planned Funding Sources

As of 12/16/2015	FY2017
PRIIA	6,103
<b>Total</b>	<b>6,103</b>

Original FY11-FY16 Cost	Current FY11 - FY16 Cost
23,550	24,382

#### Variance Analysis

No significant change.

## WMATA FY2017 Capital Project Summary

### CIP0024 Track Rehabilitation

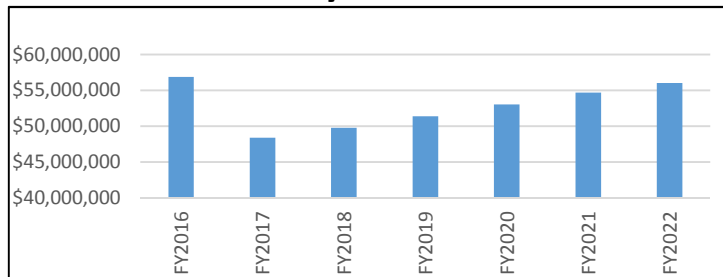
#### Project Description

This project rehabilitates the track structure by replacing deteriorated running rail, crossties, direct fixation fasteners, third rail insulators and switches annually, in addition to track stabilization and tamping. Track components require replacement when, based on industry standards, they become worn or unserviceable due to deterioration, excessive wear or defect development. Replacing these components maintains a state of good repair while preventing service delays and speed restrictions.

#### Deliverables

- 1) Tamping of 40 miles of track to support crosstie renewal
- 2) Replace 12.5 miles of running rail
- 3) Replace 20,000 fasteners
- 4) Replace 16 switches
- 5) Replace 15,000 crossties

#### Financial Summary



#### Milestones

- 1) This is an on-going program to rehabilitate track by replacing running rail, fasteners, switches, insulators and crossties.

#### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	123,700	33,745	28,147	30,447	31,541	32,551	33,496	34,448	224,376	348,076
Non-Personnel	99,755	23,148	20,266	19,338	19,865	20,490	21,209	21,593	145,908	245,662
<b>Total Budget</b>	<b>223,454</b>	<b>56,893</b>	<b>48,413</b>	<b>49,786</b>	<b>51,406</b>	<b>53,041</b>	<b>54,705</b>	<b>56,041</b>	<b>370,284</b>	<b>593,739</b>

#### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
PRIIA	48,413	213,468	279,892
<b>Total</b>	<b>48,413</b>		

#### Variance Analysis

Expanded scope and increased investment have resulted in increased project cost to reduce backlog and work towards State of Good Repair

## WMATA FY2017 Capital Project Summary CIP0025 Track Maintenance Equipment

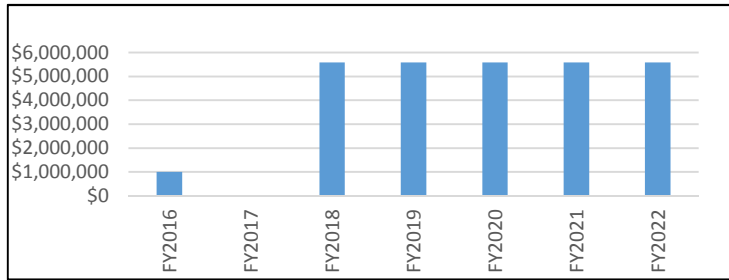
### Project Description

This project replaces heavy-duty track equipment that has reached the end of its useful life and is no longer economically feasible to maintain. Track maintenance equipment is essential to deliver quality service and for the safe execution of track rehabilitation and maintenance work. Timely replacement of self-propelled track equipment will ensure equipment reliability, reduce the probability of delays due to equipment breakdowns and allow for efficient use of track outages.

### Deliverables

1) No deliverables for FY2017. Project resumes in FY2018

### Financial Summary



### Milestones

1) Begin replacement of equipment based on condition assessment and useful life.

### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 - FY2022	
									FY2016 - FY2022	FY2011 - FY2022
Personnel	45,260	48	0	0	0	0	0	0	48	45,308
Non-Personnel	3,810	960	0	5,581	5,581	5,581	5,581	5,581	28,866	32,676
<b>Total Budget</b>	<b>49,070</b>	<b>1,007</b>	<b>0</b>	<b>5,581</b>	<b>5,581</b>	<b>5,581</b>	<b>5,581</b>	<b>5,581</b>	<b>28,914</b>	<b>77,984</b>

### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
		81,904	50,100
<b>Total</b>	<b>0</b>		

### Variance Analysis

Budget reduced in FY2016 and paused in FY2017 creating an overall cost reduction

## WMATA FY2017 Capital Project Summary CIP0026 Station/Tunnel Leak Mitigation

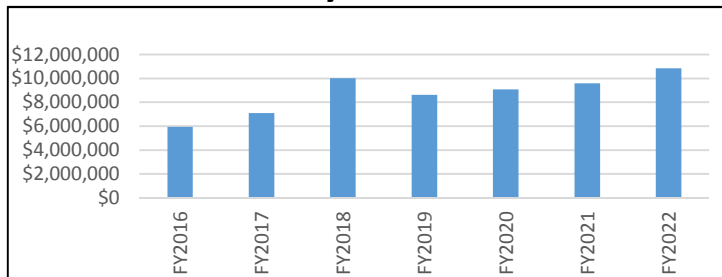
### Project Description

Station Tunnel Leak Mitigation eliminates unsafe conditions created by water leaks for Metrorail passengers and employees and also prevents service delays resulting from water intrusion. This project restores the structural integrity of tunnel liners, prevents leaks, eliminates stray currents and reduces corrosion of wayside equipment and track components. In addition, drainage improvements will be implemented to allow water to properly drain from the track bed.

### Deliverables

- 1) Eliminate 2,750 tunnel leaks
- 2) Rehabilitate 210,000 linear feet of drainage
- 3) Procure leak repair material and equipment

### Financial Summary



### Milestones

- 1) This is an on-going program to correct station and tunnel leaks throughout the Metrorail system.

### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	14,638	5,936	4,865	8,167	8,608	9,075	9,568	10,828	57,048	71,686
Non-Personnel	1,385	22	2,235	1,853	16	17	17	19	4,180	5,565
<b>Total Budget</b>	<b>16,023</b>	<b>5,958</b>	<b>7,100</b>	<b>10,019</b>	<b>8,625</b>	<b>9,092</b>	<b>9,586</b>	<b>10,847</b>	<b>61,228</b>	<b>77,250</b>

### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
PRIIA	7,100	20,451	22,256
<b>Total</b>	<b>7,100</b>		

### Variance Analysis

Increased project scope and delivery schedule to address outstanding water intrusion issues.

## WMATA FY2017 Capital Project Summary CIP0028 Materials Handling Equipment

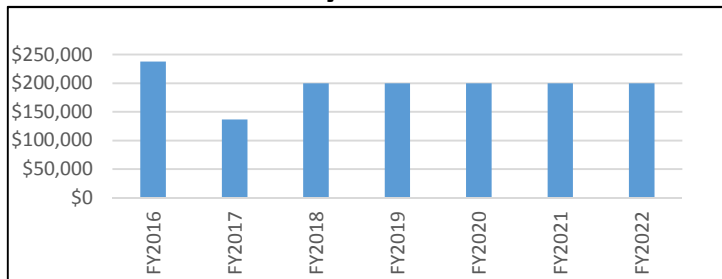
### Project Description

This project replaces supply chain equipment such as forklifts, man lifts, material transport equipment, components, and support infrastructures that have reached the end of their useful life.

### Deliverables

- 1) Continue procuring material handling equipment for warehouse facilities
- 2) Install infrastructure as required to support the new material handling equipment

### Financial Summary



### Milestones

- 1) Ongoing equipment replacement project

### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	64	38	18	27	27	27	27	35	200	264
Non-Personnel	390	200	118	173	173	173	173	165	1,175	1,565
<b>Total Budget</b>	<b>454</b>	<b>238</b>	<b>137</b>	<b>200</b>	<b>200</b>	<b>200</b>	<b>200</b>	<b>200</b>	<b>1,374</b>	<b>1,829</b>

### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
Local	137	901	716
<b>Total</b>	<b>137</b>		

### Variance Analysis

Due to procurement delays Project did not incur significant expenditures in FY2015, planned activities shifted to later years.

## WMATA FY2017 Capital Project Summary CIP0030 Currency Processing Machines

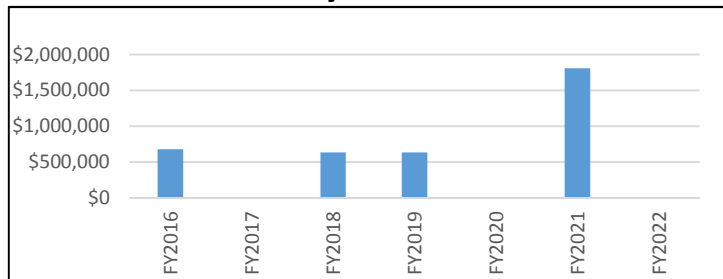
### Project Description

This project replaces existing currency machines that have exceeded their life expectancy with newer machines with advanced technology and software that will reduce breakdowns, increase efficiency by up to 50 percent, and increase reliability.

### Deliverables

No planned activities for FY2017

### Financial Summary



### Milestones

- 1) FY2018 - Currency Machine Lifecycle Replacement Design
- 2) FY2019 - Currency Machine Lifecycle Replacement Implementation Plan development
- 3) FY2021 - Deployment of Currency Machine Lifecycle replacements

### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 - FY2022	
									FY2016 - FY2022	FY2011 - FY2022
Personnel	162	202	0	151	151	0	0	0	504	666
Non-Personnel	2,089	478	0	482	482	0	1,809	0	3,251	5,340
<b>Total Budget</b>	<b>2,251</b>	<b>680</b>	<b>0</b>	<b>633</b>	<b>633</b>	<b>0</b>	<b>1,809</b>	<b>0</b>	<b>3,755</b>	<b>6,006</b>

### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
<b>Total</b>	<b>0</b>	<b>2,900</b>	<b>2,969</b>

### Variance Analysis

No significant variance

## WMATA FY2017 Capital Project Summary

### CIP0035 Bicycle & Pedestrian Facilities: Capacity Improvements

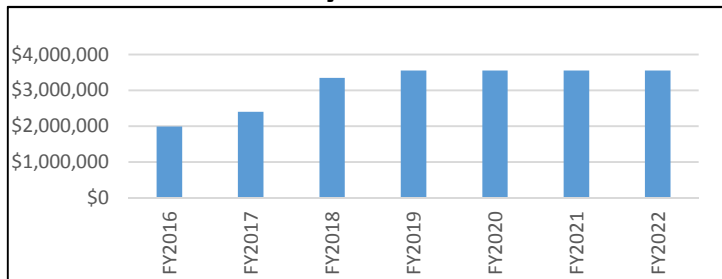
#### Project Description

This project will increase bicycle parking capacity at Metrorail stations and improve bicycle and pedestrian connections to stations from local communities. In an effort to meet the 2030 goal of doubling bike ridership, this project also provides for the construction of new expansion secure bicycle parking facilities. Additionally, this project replaces bike racks and lockers that are structurally damaged.

#### Deliverables

- 1) Construction of 2 New Bike Facilities at West Hyattsville and Franconia Springfield Stations
- 2) Replacement of 200 existing Bike lockers and racks that have reached end of useful life
- 3) Planning / Design of 2 New Bike Facilities located at Fort Totten and Twinbrook

#### Financial Summary



#### Milestones

- 1) FY2018 - Begin Construction of New Bike Facilities at Fort Totten and Twinbrook
- 2) FY2019 - FY2022 Development of 2 New Bike Facilities per year at locations to be determined

#### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	1,374	487	399	529	529	529	529	529	3,529	4,904
Non-Personnel	5,412	1,502	2,001	2,817	3,022	3,022	3,022	3,022	18,409	23,821
<b>Total Budget</b>	<b>6,787</b>	<b>1,988</b>	<b>2,400</b>	<b>3,346</b>	<b>3,551</b>	<b>3,551</b>	<b>3,551</b>	<b>3,551</b>	<b>21,938</b>	<b>28,725</b>

#### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
Federal Formula	2,400	6,936	9,095
<b>Total</b>	<b>2,400</b>		

#### Variance Analysis

Increased Project delivery and expansion of Bike Facilities Authority-wide



## WMATA FY2017 Capital Project Summary

### CIP0039 Core & System Capacity Project Development

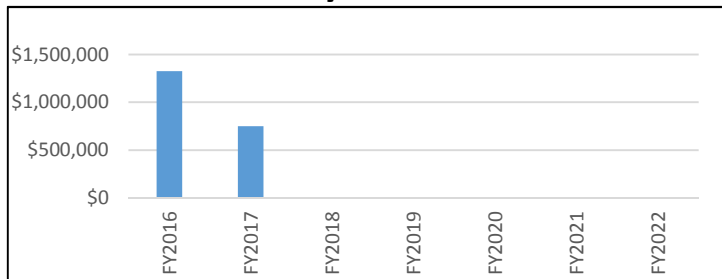
#### Project Description

This project conducts near-term and long-range planning studies and produces financial and implementation plans for core capacity enhancements in order to improve travel time, customer comfort, pedestrian flow, vertical transportation, line or route operations, and station access.

#### Deliverables

- 1) Determine feasibility of proposed new junctions, pocket tracks and turnbacks
- 2) Develop Station Area Strategic Investment Plan
- 3) Prepare documentation for future core capacity grant application

#### Financial Summary



#### Milestones

- 1) Complete development of Regional transit system plan - September 2016
- 2) Future Core capacity grant application development

#### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	2,960	169	0	0	0	0	0	0	169	3,129
Non-Personnel	5,372	1,157	750	0	0	0	0	0	1,907	7,278
<b>Total Budget</b>	<b>8,332</b>	<b>1,326</b>	<b>750</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,076</b>	<b>10,408</b>

#### Planned Funding Sources

As of 12/16/2015	FY2017
Local	750
<b>Total</b>	<b>750</b>

Original FY11-FY16 Cost	Current FY11 - FY16 Cost
6,175	9,721

#### Variance Analysis

Project scope has expanded to meet increased demand for near and long term planning initiatives

## WMATA FY2017 Capital Project Summary

### CIP0042 Bus & Rail Asset Management Software

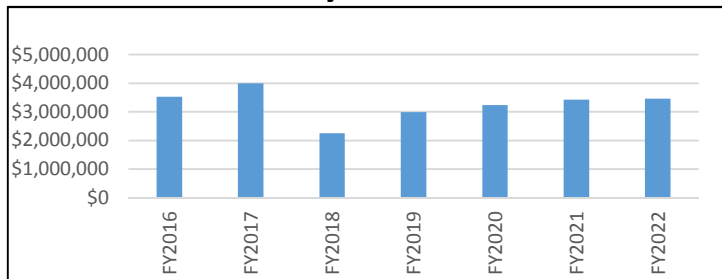
#### Project Description

This project funds upgrades and enhancements to Maximo, Metro's Asset and Work Management Tracking System that is critical to the functions of rail and bus. The project involves the development, analysis, and documentation of organizational and business requirements and their associated processes by WMATA and industry-specific subject matter experts. Aids in the maintenance and upgrades of specific software including: Maximo, Windchill, Fleetwatch and Optram.

#### Deliverables

- 1) Test and evaluation of mobile platform solutions - April 2016
- 2) Execute pilot deployment of Storeroom management platform - July 2016
- 3) Replacement of Server Farm and Integration software - February 2016
- 4) Design and Development of Maximo 7.6 Upgrade - September 2016

#### Financial Summary



#### Milestones

- 1) FY2017 - Maximo Inventory clean up, standardization of inventory protocols
- 2) FY2018 - Service Oriented Architecture Integration, MX7.6 Go-live, Execution of Compliance reporting module
- 3.) FY2021 Predictive Maintenance Evaluation (PME) deployment

#### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	510	376	166	133	235	202	256	346	1,713	2,223
Non-Personnel	13,904	3,155	3,834	2,119	2,761	3,039	3,175	3,117	21,200	35,105
<b>Total Budget</b>	<b>14,414</b>	<b>3,531</b>	<b>4,000</b>	<b>2,251</b>	<b>2,996</b>	<b>3,241</b>	<b>3,431</b>	<b>3,463</b>	<b>22,913</b>	<b>37,328</b>

#### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
Local	4,000	26,439	18,111
<b>Total</b>	<b>4,000</b>		

#### Variance Analysis

Maximo 7.6 Upgrade development shifted to FY2017, Storeroom Management software deployment shifted to FY2017

## WMATA FY2017 Capital Project Summary CIP0043 Bus Operations Support Software

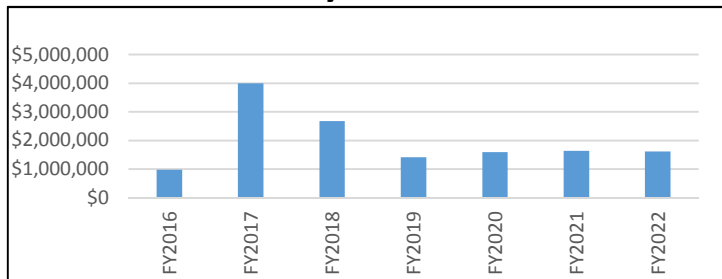
### Project Description

This project deploys centralized, field and on-board bus applications such as Automatic Vehicle Maintenance (AVM), Automatic Vehicle Location (AVL), Automated Passenger Counting (APC), Bus Scheduling and CAD (Computer Aided Dispatch) systems. Additionally, this project compiles the data and provides tools to support customer information needs.

### Deliverables

- 1) Database upgrades for Metro Access and Bus Operations
- 2) Updates to Ridechecker App software, enhancements to the Bus Data Warehouse
- 3) Integration of Vehicle Maintenance, Incident Management and Customer complaint central database
- 4) Bus Operations Control Center (BOCC) hardware replacement

### Financial Summary



### Milestones

- 1) FY2017 - begin implementation of six year plan to include: Bus Data Warehouse enhancements, Mobile Apps for Bus Planning, Regional Bus Stop Application, Executive Information System Dashboard and Scheduling upgrade

### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	1,841	47	190	149	117	153	214	216	1,085	2,926
Non-Personnel	7,186	937	3,810	2,533	1,298	1,445	1,429	1,399	12,851	20,037
<b>Total Budget</b>	<b>9,027</b>	<b>983</b>	<b>4,000</b>	<b>2,682</b>	<b>1,414</b>	<b>1,598</b>	<b>1,643</b>	<b>1,615</b>	<b>13,936</b>	<b>22,963</b>

### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
Local	4,000	18,012	10,029
<b>Total</b>	<b>4,000</b>		

### Variance Analysis

Scheduling System upgrade and Regional Bus Stop Application Project launch has shifted into FY2017, entire schedule has shifted to later years

## WMATA FY2017 Capital Project Summary

# CIP0044 IT Business Process Reengineering and Program Support

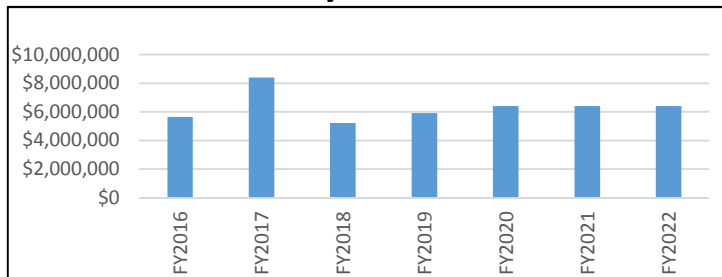
### Project Description

This project provides business process support to IT Capital investments. This project utilizes expertise in reviewing and documenting the current state and providing input into future business processes. Also within this project are Quality Management initiatives to support Capital Projects with documentation, process audits and corrective action recommendations to ensure continuity. Additionally, the project evaluates options for future change management and business intelligence tool implementation.

### Deliverables

- 1) July 2016 - Launch of Enterprise Process Continuity project
- 2) Development of cohesive strategy for failure analysis, predictive analytics and decision modeling
- 3) Clarity Reporting system upgrades - July 2016
- 4) Development of Transparent data sets for web application software Apps

### Financial Summary



### Milestones

- 1) FY2017 - Launch of Authority wide Inter-connectedness and Enterprise Continuity program
- 2) FY2017 - IT Department ISO Certification process development

### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	1,719	707	764	629	698	884	1,031	1,158	5,871	7,590
Non-Personnel	24,528	4,940	7,636	4,605	5,224	5,530	5,383	5,256	38,575	63,103
<b>Total Budget</b>	<b>26,247</b>	<b>5,648</b>	<b>8,400</b>	<b>5,234</b>	<b>5,922</b>	<b>6,414</b>	<b>6,414</b>	<b>6,414</b>	<b>44,446</b>	<b>70,693</b>

### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
Local	8,400	27,278	31,924
<b>Total</b>	<b>8,400</b>		

### Variance Analysis

Additional costs associated with launch of Quality Management and Enterprise Architecture Projects

## WMATA FY2017 Capital Project Summary CIP0045 Data Centers and Infrastructures

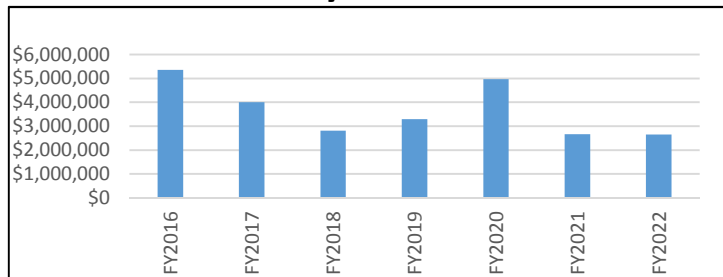
### Project Description

This project is focused on implementation and integration of data center infrastructure technologies which can achieve higher operational efficiencies, increase capacity, increase service availability and reduce risk to the underlying business services. Furthermore, this project updates the data center infrastructure, including an upgrade of the data center facility and computer rooms, transition of enterprise platforms to client-server, enterprise storage and the consolidation of redundant and inefficient server infrastructure.

### Deliverables

- 1) Storage Area Network Infrastructure replacement
- 2) Data Center and Virtual Storage improvements
- 3) Infrastructure upgrades to enhance security of accessibility to various IT platforms

### Financial Summary



### Milestones

- 1) FY2017 - Implementation and migration to new Storage Network

### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	1,852	577	538	379	430	460	245	251	2,880	4,732
Non-Personnel	26,528	4,788	3,462	2,435	2,863	4,508	2,415	2,402	22,872	49,400
<b>Total Budget</b>	<b>28,380</b>	<b>5,365</b>	<b>4,000</b>	<b>2,814</b>	<b>3,293</b>	<b>4,968</b>	<b>2,659</b>	<b>2,653</b>	<b>25,752</b>	<b>54,132</b>

### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
Local	4,000	25,810	33,762
<b>Total</b>	<b>4,000</b>		

### Variance Analysis

Additional costs associated with updates to Data Storage Area Network, installation of Fire Suppression system in Data Center and installation of Automated Key dispensing system

## WMATA FY2017 Capital Project Summary CIP0046 Document Management System

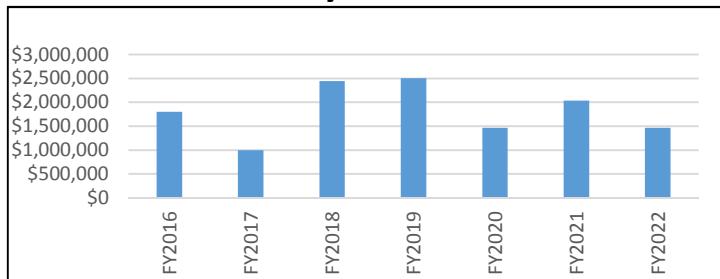
### Project Description

This project provides for enterprise-wide document management, integration of the document management system with major enterprise systems and compliance with enterprise wide document retention. This project will also assist moving many manual paper based processes to electronic processes by enabling enterprise applications such as PeopleSoft and Maximo to easily be linked to electronic records and forms as well as enhance the ability to respond to information requests.

### Deliverables

- 1) Continue Document transfer from paper to electronic format
- 2) Upgrade of HR file room digitization capabilities
- 3) Workflow enhancements for Railcar Engineering

### Financial Summary



### Milestones

- 1) Documentum Software Upgrades to version 8.x
- 2) Captiva Software Upgrades to version 8.x

### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	692	723	361	845	905	519	721	520	4,594	5,286
Non-Personnel	10,695	1,077	639	1,598	1,599	947	1,316	947	8,125	18,820
<b>Total Budget</b>	<b>11,387</b>	<b>1,800</b>	<b>1,000</b>	<b>2,443</b>	<b>2,505</b>	<b>1,466</b>	<b>2,038</b>	<b>1,467</b>	<b>12,718</b>	<b>24,106</b>

### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
Local	1,000	11,453	13,200
<b>Total</b>	<b>1,000</b>		

### Variance Analysis

Additional costs incurred to accelerate digitization efforts

## WMATA FY2017 Capital Project Summary

# CIP0047 Enterprise Geographic Information System

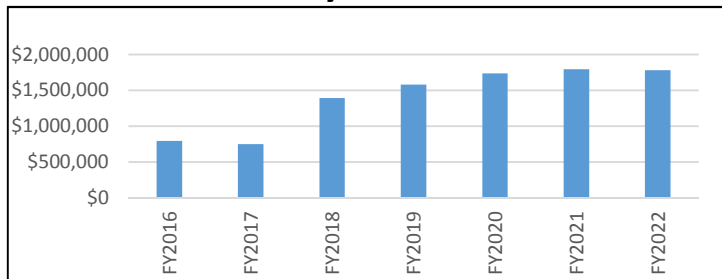
### Project Description

This project creates an enterprise Geographic Information System (GIS) to support Authority-wide integrated mapping and data. The GIS will make information consistent and easily accessible throughout the Authority. This project will also integrate key maps, drawings, asset records and emergency access locations that are critical for timely emergency responses.

### Deliverables

- 1) Automatic Vehicle Locator and Automatic Vehicle Monitor interfaced with Google Maps for real-time location information
- 2) Bus & Rail Real-time Software system upgrades
- 3) Upgrade system to ArcGIS 10.2.2/Oracle 12c.

### Financial Summary



### Milestones

- 1) FY2017 - Deploy GIS web portal to simplify spatial data sharing agency-wide
- 2) FY2017 - Compile Bus, Rail and Access route and stop data into one intermodal network
- 3) FY2018 - Migrate Authority web viewer legacy code from Adobe flash to JavaScript

### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	2,227	38	0	0	0	0	0	0	38	2,265
Non-Personnel	4,635	758	750	1,392	1,583	1,736	1,794	1,780	9,792	14,426
<b>Total Budget</b>	<b>6,862</b>	<b>796</b>	<b>750</b>	<b>1,392</b>	<b>1,583</b>	<b>1,736</b>	<b>1,794</b>	<b>1,780</b>	<b>9,830</b>	<b>16,691</b>

### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
Local	750	16,467	7,665
<b>Total</b>	<b>750</b>		

### Variance Analysis

In FY2013, a portion of Project staff shifted to the operating budget as project tasks evolved. Additionally, Bus Transit Service Network task was cancelled.

## WMATA FY2017 Capital Project Summary

### CIP0048 Sensitive Data Protection Technology

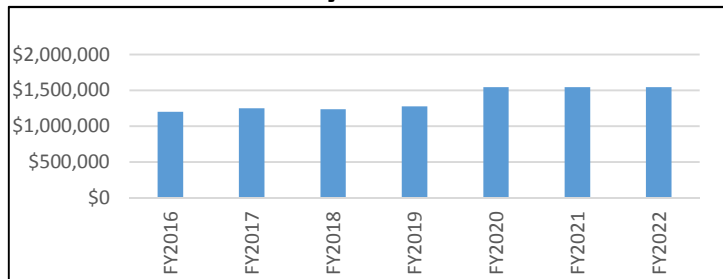
#### Project Description

This project provides a comprehensive Authority-wide security architecture that will reduce the risk of malicious attacks and cyber-terrorism as well as fraud and waste while achieving and maintaining regulatory compliance.

#### Deliverables

- 1) Ongoing enhancements in Data Security apparatus
- 2) Implement updates to Resilience Management, Firewall Protection and Data Breach Management software
- 3) Roll out one-click sign in (Single Sign On) for all PeopleSoft, Maximo, Documentum and Cognos applications

#### Financial Summary



#### Milestones

- 1) FY2017 Launch three year cycle of Firewall Hardware replacements
- 2) Complete the Single Sign On initiative

#### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	1,205	594	324	319	165	319	319	319	2,360	3,566
Non-Personnel	18,217	606	926	917	1,111	1,224	1,224	1,227	7,234	25,450
<b>Total Budget</b>	<b>19,422</b>	<b>1,200</b>	<b>1,250</b>	<b>1,235</b>	<b>1,276</b>	<b>1,543</b>	<b>1,543</b>	<b>1,546</b>	<b>9,594</b>	<b>29,016</b>

#### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
Local	1,250	26,941	20,653
<b>Total</b>	<b>1,250</b>		

#### Variance Analysis

Completed projects shifted to maintenance and operating budget support



## WMATA FY2017 Capital Project Summary CIP0049 Management Support Software

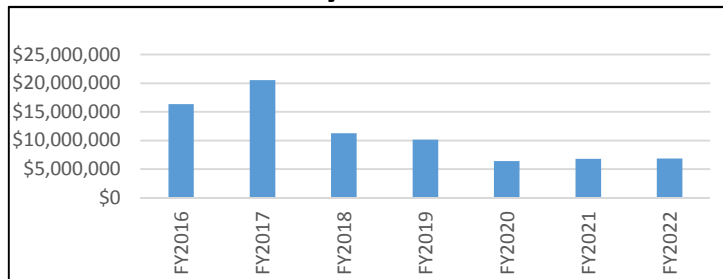
### Project Description

This project replaces and/or updates software that supports corporate and financial control of operations such as treasury, budget, cash management, Human Capital Management (HCM), procurement, asset management, Customer Relationship Management, Service Oriented Architecture (SOA) and vendor management functions. This project is essential for Metro to maintain sufficient financial controls to manage its corporate operations.

### Deliverables

- 1) Deployment and QA testing of the Enterprise Learning Management System
- 2) Implementation of the Windchill Lifecycle Management system, establish failure analysis and Asset lifecycle strategy
- 3) Begin upgrades to PeopleSoft Financial and Enterprise Resource Planning modules, last update 2010

### Financial Summary



### Milestones

- 1) FY2017 Complete transition from CRM to Oracle Right Now system
- 2) Complete deployment of Oracle Fusion upgrades, begin QA testing

### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	3,984	1,461	1,632	924	325	377	379	477	5,576	9,560
Non-Personnel	54,218	14,891	18,888	10,331	9,816	6,016	6,452	6,359	72,753	126,971
<b>Total Budget</b>	<b>58,202</b>	<b>16,352</b>	<b>20,520</b>	<b>11,256</b>	<b>10,141</b>	<b>6,393</b>	<b>6,832</b>	<b>6,836</b>	<b>78,329</b>	<b>136,530</b>

### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
Local	20,520	28,907	74,619
<b>Total</b>	<b>20,520</b>		

### Variance Analysis

Expanded SOA and Enterprise Architecture projects to address FMO recommendations, Implement Standardized Timekeeping Solution

## WMATA FY2017 Capital Project Summary

### CIP0050 Metro IT One Stop and Office Automation

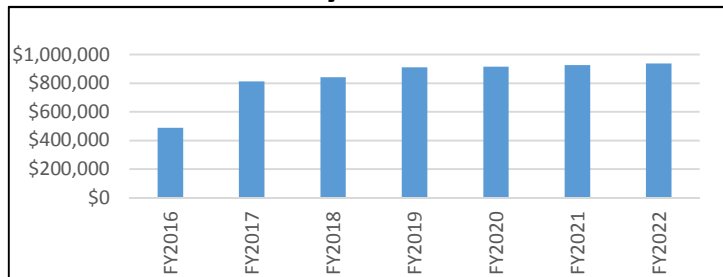
#### Project Description

This project implements an enterprise level PC Replacement program, Help Desk Knowledgebase System, updated Customer Relationship Management System and one-stop IT Customer Support.

#### Deliverables

1) Ongoing Authority-wide PC Desktop, laptop and tablet replacements

#### Financial Summary



#### Milestones

1) Ongoing annual project, replace units upon lifecycle completion

#### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	694	308	334	346	375	0	381	381	2,123	2,817
Non-Personnel	9,370	181	478	496	537	915	546	557	3,709	13,080
<b>Total Budget</b>	<b>10,064</b>	<b>488</b>	<b>812</b>	<b>841</b>	<b>911</b>	<b>915</b>	<b>926</b>	<b>938</b>	<b>5,833</b>	<b>15,897</b>

#### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
Local	812	20,714	10,566
<b>Total</b>	<b>812</b>		

#### Variance Analysis

Project substantially descope, resulting in fewer computers being replaced annually. Useful lifecycle length extended.

## WMATA FY2017 Capital Project Summary

### CIP0051 Police Dispatch and Records Management

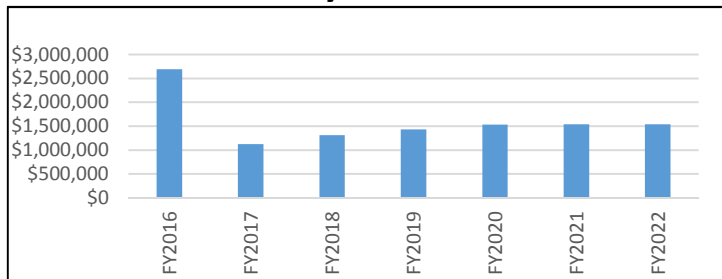
#### Project Description

This project replaces the current Metro Transit Police Department (MTPD) legacy dispatch system with an up-to-date Computer Aided Dispatch and Records Management System, Organizational and Criminal Reporting, Automated Vehicle Location (AVL), communications integration, and mobile terminals and devices, to support MTPD response, communications, command and control, investigations, logistics, records management, multilateral reporting and business processes to improve and ensure the safety and security of WMATA for its customers and employees.

#### Deliverables

- 1) Upgrade to Motorola Systems Solution and train MTPD staff to utilize new platform
- 2) Integration of Motorola Systems to Cognos and Automatic Vehicle Locator (AVL)
- 3) Deployment of the Disaster Recovery software
- 4) Implementation of Scheduling Business Intelligence software, Suspicious Activity Reporting module and Use of Force reporting software

#### Financial Summary



#### Milestones

- 1) FY2018 - Upgrades to Computer Aided Dispatch and Records Management System complete
- 2) FY2020 Mobilization for the Mobile Device Console System Refresh

#### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	522	432	248	557	385	207	237	578	2,644	3,166
Non-Personnel	6,660	2,259	875	754	1,047	1,325	1,300	965	8,524	15,184
<b>Total Budget</b>	<b>7,182</b>	<b>2,690</b>	<b>1,123</b>	<b>1,311</b>	<b>1,432</b>	<b>1,532</b>	<b>1,537</b>	<b>1,542</b>	<b>11,168</b>	<b>18,350</b>

#### Planned Funding Sources

As of 12/16/2015	FY2017
Local	1,123
<b>Total</b>	<b>1,123</b>

Original FY11-FY16 Cost	Current FY11 - FY16 Cost
995	9,885

#### Variance Analysis

Project scope substantially expanded to modernize all MTPD software systems

## WMATA FY2017 Capital Project Summary CIP0052 Network and Communications

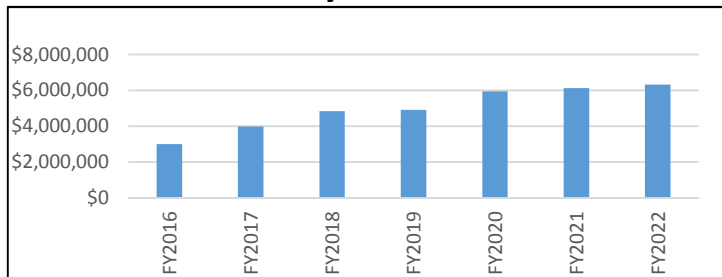
### Project Description

This project provides a communications network that supports Metro's current and future Networking and Communication needs. This project will also provide multi-protocol high bandwidth wired and wireless network solutions. The communication networks enable resource and information sharing for business functions such as voice communications, email, internet access, rail and bus operations and monitoring, surveillance systems and administrative business systems.

### Deliverables

- 1) Replacement of Server Hardware and Cabling for Communications Voice and Data systems
- 2) Replacement of 100 Routers in Rail Stations, Administrative and Maintenance facilities

### Financial Summary



### Milestones

- 1) FY2017 Hardware Upgrades complete
- 2) FY2018 Rollout of Wireless Accessibility at Rail Stations
- 3) FY2018 Deployment of Online Traction Power Controller

### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	3,039	190	106	194	196	238	245	253	1,422	4,461
Non-Personnel	17,063	2,810	3,870	4,652	4,713	5,711	5,882	6,061	33,699	50,762
<b>Total Budget</b>	<b>20,102</b>	<b>3,000</b>	<b>3,976</b>	<b>4,845</b>	<b>4,910</b>	<b>5,948</b>	<b>6,127</b>	<b>6,314</b>	<b>35,121</b>	<b>55,223</b>

### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
Local	3,976	30,203	23,194
<b>Total</b>	<b>3,976</b>		

### Variance Analysis

Delayed project initiation resulted in expenditures shifting into later years

## WMATA FY2017 Capital Project Summary

### CIP0054 Customer Electronic Communications & Outreach

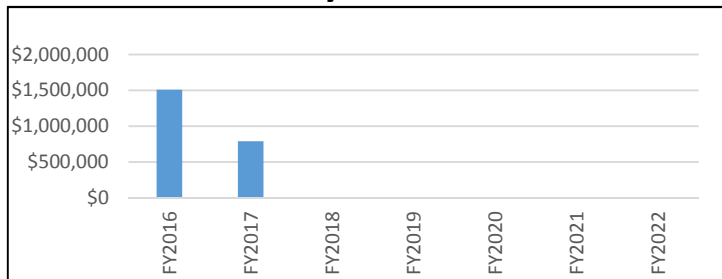
#### Project Description

This project provides enhanced electronic communications and systems to support the efficient delivery of services and customer outreach that focuses on customer demands for rapid and flexible data delivery systems for Metro communications, schedules, system alerts, commuting benefits, and fares. Additionally, this project develops and implements Web Applications utilized by WMATA departments to deliver efficient core services.

#### Deliverables

- 1) Develop General Orders Track Rights System (GOTRS) replatform to HTML 5 - June 2017
- 2) Contractor Automated Timekeeping System (CATS) software release 3.0 to fix functionality issues
- 3) Design and Build Personal "Sign On" feature for public facing WMATA.com - June 2017
- 4) Site Specific Work Plan App software release 2.0 complete - June 2017

#### Financial Summary



#### Milestones

- 1) GOTRS migration complete FY2017
- 2) CATS improvements and enhancements complete FY2017

#### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	2,369	72	0	0	0	0	0	0	72	2,440
Non-Personnel	7,721	1,436	791	0	0	0	0	0	2,227	9,948
<b>Total Budget</b>	<b>10,089</b>	<b>1,508</b>	<b>791</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,299</b>	<b>12,388</b>

#### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
Local	791	13,893	11,628
<b>Total</b>	<b>791</b>		

#### Variance Analysis

This project had a reduction in cost due to a decrease in project scope

## WMATA FY2017 Capital Project Summary CIP0056 Rail Operations Support Software

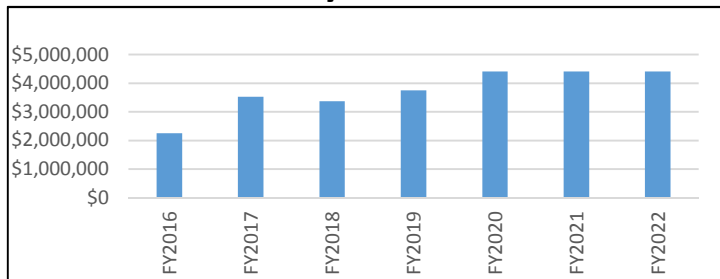
### Project Description

This project provides software application support for the Rail Operations Control Centers and other rail operation areas in order to receive vendor support and operate the rail system. The project involves the development, analysis and documentation of organizational and business requirements and their associated processes by WMATA and industry-specific subject matter experts, the procurement of the necessary hardware, software, and resources.

### Deliverables

- 1) Infrastructure Upgrades to Red Line ATC Remote Terminal Units to interface AIM system for Rail location monitoring and active control
- 2) Alarm Management System software development to begin
- 3) Develop Parallel Environment to synchronize Testing Lab, JGB Operations Control Center and CTF Operations Control Center
- 4) AIM systems training for IT and OCC personnel

### Financial Summary



### Milestones

- 1) FY2017 - AIM Training completion
- 2) FY2017 - Parallel Environment Development complete
- 3) FY2018 Alarm Management System software development complete

### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	920	155	94	86	115	132	505	504	1,591	2,511
Non-Personnel	10,371	2,096	3,432	3,284	3,631	4,279	3,907	3,907	24,536	34,907
<b>Total Budget</b>	<b>11,291</b>	<b>2,251</b>	<b>3,527</b>	<b>3,370</b>	<b>3,745</b>	<b>4,411</b>	<b>4,411</b>	<b>4,411</b>	<b>26,127</b>	<b>37,418</b>

### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
Local	3,527	27,108	13,553
<b>Total</b>	<b>3,527</b>		

### Variance Analysis

Due to funding constraints over FY2011-FY2016 period Projects have been delayed, shifting expenditures to later years

## WMATA FY2017 Capital Project Summary CIP0057 1000 Series Rail Car Replacement

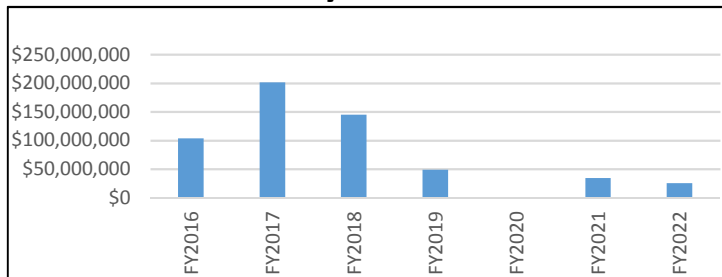
### Project Description

This project replaces all 300 of the 1000 Series railcars, which were purchased between 1974 and 1978, with new 7000 Series railcars. This project is one component of a combined program plan structured to avoid repetitive developmental cost associated with a new car design and procurement.

### Deliverables

1) Continue delivery of 1000 Series Rail cars

### Financial Summary



### Milestones

1) Delivery of Final Rail Car is expected for FY2019  
2) Planned warranty payments are expected to begin FY2021

### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	2,333	9,367	9,740	1,402	1,521	0	7,210	5,722	34,963	37,296
Non-Personnel	106,375	94,633	191,860	143,782	47,795	0	27,466	19,719	525,255	631,629
<b>Total Budget</b>	<b>108,708</b>	<b>104,000</b>	<b>201,600</b>	<b>145,183</b>	<b>49,317</b>	<b>0</b>	<b>34,676</b>	<b>25,442</b>	<b>560,218</b>	<b>668,926</b>

### Planned Funding Sources

As of 12/16/2015	FY2017
PRIIA	110,980
Debt	90,620
<b>Total</b>	<b>201,600</b>

Original FY11-FY16 Cost	Current FY11 - FY16 Cost
718,057	212,724

### Variance Analysis

Project schedule is delayed from original planned budget. Budget has also been reduced due to decreased contingency. Change in overhead calculation has also reduced the required budget for this project

## WMATA FY2017 Capital Project Summary CIP0059 2000/3000 Series Rail Car Replacement

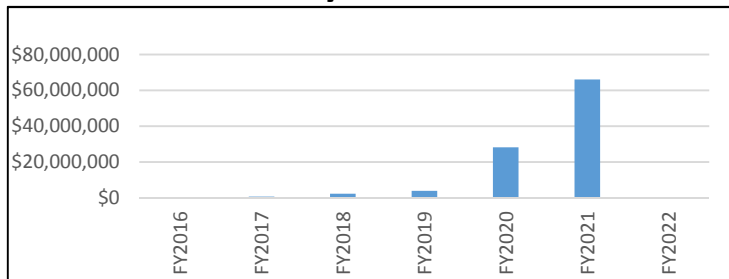
### Project Description

This project replaces all 366 of the 2000 and 3000 Series railcars, which were purchased between 1983 and 1988, with new 8000 Series railcars. The total estimated cost of this project is approximately \$1.4 billion. The FY2016-2022 project plan includes \$102 million, consistent with the current project schedule. The remaining \$1.3 billion is planned beyond FY2022.

### Deliverables

1) Begin design and development activities for the replacement of the 2000/3000 Series railcars.

### Financial Summary



### Milestones

1) Complete design and award of the 8000 series procurement

### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 - FY2022	
									FY2016 - FY2022	FY2011 - FY2022
Personnel	0	14	0	522	167	210	488	0	1,401	1,401
Non-Personnel	0	285	700	1,791	3,814	28,039	65,673	0	100,301	100,301
<b>Total Budget</b>	<b>0</b>	<b>299</b>	<b>700</b>	<b>2,312</b>	<b>3,981</b>	<b>28,249</b>	<b>66,161</b>	<b>0</b>	<b>101,703</b>	<b>101,703</b>

### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
State of Good Repair	700	0	299
<b>Total</b>	<b>700</b>		

### Variance Analysis

Project was not in the original CFA as it was planned for beyond FY2016.



## WMATA FY2017 Capital Project Summary CIP0060 4000 Series Rail Car Replacement

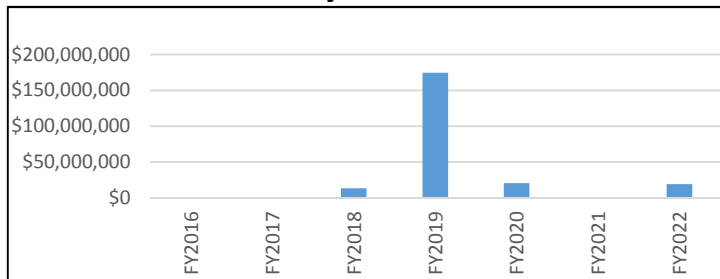
### Project Description

This project replaces all 100 of the 4000 Series railcars, which were purchased during 1992-1994, in order to meet current safety standards. To meet current safety standards and based on pricing, it is more economical to replace the 4000 Series railcars than to do a mid-life rehabilitation. In order to gain economies of scale and improve quality, this work is to be done through an option on the 7000 Series railcar contract.

### Deliverables

No activities planned in FY2017

### Financial Summary



### Milestones

1) Budget assumes delivery of the first of the 100 railcars in FY2019

### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	0	0	0	521	6,895	5,150	0	749	13,314	13,314
Non-Personnel	22,695	0	0	12,666	167,490	15,218	0	18,186	213,561	236,256
<b>Total Budget</b>	<b>22,695</b>	<b>0</b>	<b>0</b>	<b>13,187</b>	<b>174,385</b>	<b>20,368</b>	<b>0</b>	<b>18,935</b>	<b>226,875</b>	<b>249,571</b>

### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
		209,847	22,695
<b>Total</b>	<b>0</b>		

### Variance Analysis

Delay in original procurement schedule created a reduction in expenditures between FY2011 and FY2016

## WMATA FY2017 Capital Project Summary CIP0063 Railcar Rehabilitation Program

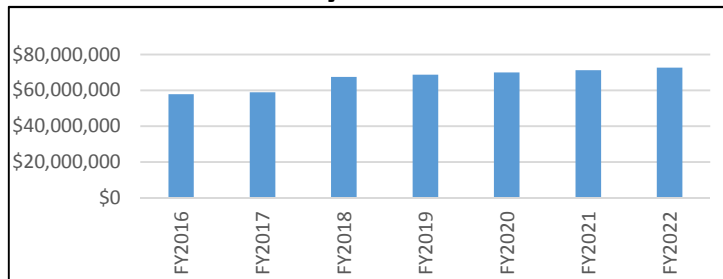
### Project Description

This project provides for the scheduled overhaul of repairable Railcar components to sustain the Railcar lifecycle. This project will support scheduled overhauls in order to maintain a Railcar state of good repair, improve lifecycle safety and Railcar reliability. Approximately one-fifth of the fleet (225 cars), are subject to heavy overhaul annually. Major heavy overhaul components include replacement of wheels, brake systems, traction motors and truck overhaul.

### Deliverables

1) Schedule major overhauls necessary to maintain scheduled component, assembly, and subassembly overhauls. Identification of scheduled overhaul components, assembly and subassembly float levels

### Financial Summary



### Milestones

1) Ongoing rehabilitation project with newly assigned tasks and milestones as needed

### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	57,527	40,095	38,369	43,494	44,855	46,276	47,728	49,221	310,039	367,566
Non-Personnel	57,986	17,825	20,631	23,980	23,835	23,688	23,538	23,385	156,882	214,867
<b>Total Budget</b>	<b>115,513</b>	<b>57,920</b>	<b>59,000</b>	<b>67,473</b>	<b>68,690</b>	<b>69,964</b>	<b>71,266</b>	<b>72,607</b>	<b>466,920</b>	<b>582,434</b>

### Planned Funding Sources

As of 12/16/2015	FY2017
State of Good Repair	29,000
Local	30,000
<b>Total</b>	<b>59,000</b>

Original FY11-FY16 Cost	Current FY11 - FY16 Cost
77,700	173,450

### Variance Analysis

The budget has increased compared to the previously approved 6-year plan, this ensures that all of the personnel cost for this federally eligible capital activity is now funded out of the capital budget.

## WMATA FY2017 Capital Project Summary

### CIP0067 Rail Care Safety & Reliability Enhancements

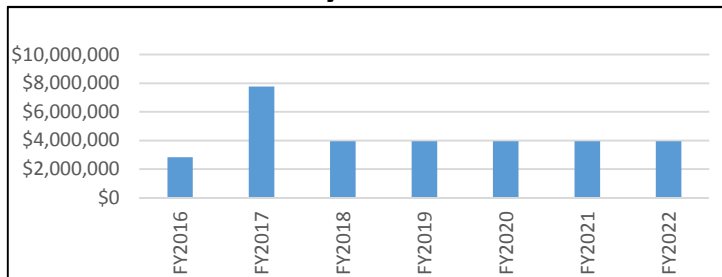
#### Project Description

This project performs engineering analysis, diagnosis, testing and resolution of safety, maintenance and operational issues relating to the railcar fleet and its interaction with track work, automatic train control, communication and power systems, resolving compatibility issues across the various fleets and infrastructure related to changes and aging technology which improves the safety and reliability of railcars.

#### Deliverables

1) Resolve safety, reliability and compatibility issues across the various fleets. The following deliverables will be implemented across different fleets as needed: install emergency exterior door releases, resolve wrong side door opening issue, install communications control panels, install Railcar rollback prevention and complete the improvements to the HVAC systems for the 5000 series railcars. In addition to these deliverables, this project is utilized to perform engineering analysis, diagnostics and testing on WMATA's fleet as necessary throughout the year.

#### Financial Summary



#### Milestones

- 1) Complete installation of digital radios and CCPs in 5000 Series fleet
- 2) Complete replacement of all emergency exit doors in 4000 Series cars
- 3) Complete testing of HVAC systems in the 5000 Series cars

#### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	1,501	458	530	189	69	38	40	41	1,365	2,866
Non-Personnel	23,074	2,372	7,231	3,758	3,879	3,909	3,908	3,907	28,965	52,039
<b>Total Budget</b>	<b>24,575</b>	<b>2,830</b>	<b>7,761</b>	<b>3,948</b>	<b>3,948</b>	<b>3,948</b>	<b>3,948</b>	<b>3,948</b>	<b>30,330</b>	<b>54,905</b>

#### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
State of Good Repair	7,761	21,191	27,365
<b>Total</b>	<b>7,761</b>		

#### Variance Analysis

Costs have increased for this project due to additional identified needs for safety improvements.

## WMATA FY2017 Capital Project Summary

### CIP0068 Railcar Fleet Replacement - 7000 Series

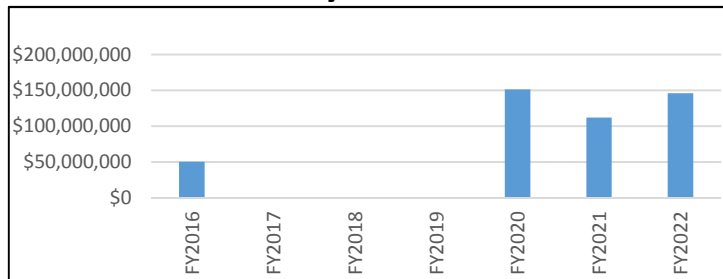
#### Project Description

This project will procure 220 Railcars, 192 of these cars will be used to replace existing 5000 series Railcars with safer more reliable 7000 series Railcars. The remaining 28 vehicles will be used to increase the size of WMATA's fleet and be used to eliminate turnbacks on the Red Line. The total estimated cost of this project is \$615 million. The FY2016-2022 project plan includes \$460 million, consistent with the current project schedule. The remaining \$155M is planned beyond FY2022.

#### Deliverables

1) No planned activities for FY2017

#### Financial Summary



#### Milestones

1) Budget assumes delivery of the first of the 220 railcars in FY2020

#### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 - FY2022	
									FY2016 - FY2022	FY2011 - FY2022
Personnel	0	2,412	0	0	0	16,970	20,069	34,142	73,592	73,592
Non-Personnel	0	48,231	0	0	0	134,434	91,769	111,700	386,133	386,133
<b>Total Budget</b>	<b>0</b>	<b>50,642</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>151,404</b>	<b>111,837</b>	<b>145,842</b>	<b>459,726</b>	<b>459,726</b>

#### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
		0	50,642
<b>Total</b>	<b>0</b>	<b>0</b>	<b>50,642</b>

#### Variance Analysis

Project not in the original CFA

## WMATA FY2017 Capital Project Summary

### CIP0071 Test Track & Railcar Commissioning Facility

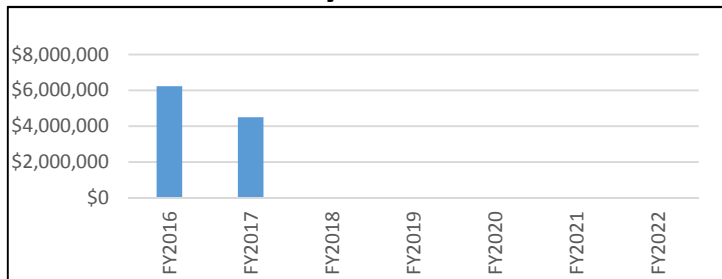
#### Project Description

This project designs and constructs 10,000 feet of test track between the College Park and Greenbelt Metrorail stations. In addition, this project includes the design and construction of a multi-storey Commissioning facility and parking facility in the Greenbelt Rail Yard. Both facilities will be used to commission and test new and rehabilitated railcars.

#### Deliverables

- 1) Commissioning facility parking garage complete
  
- 1) Test Track Construction Punch list items - December 2015
  
- 2) Project closeout September 2016

#### Financial Summary



#### Milestones

- 1) Project closeout September 2016

#### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	14,783	2,585	1,865	0	0	0	0	0	4,450	19,233
Non-Personnel	73,559	3,650	2,635	0	0	0	0	0	6,285	79,843
<b>Total Budget</b>	<b>88,341</b>	<b>6,235</b>	<b>4,500</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10,735</b>	<b>99,076</b>

#### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
Local	4,500	86,373	94,935
<b>Total</b>	<b>4,500</b>		

#### Variance Analysis

Project duration extended resulting in additional labor and shutdown costs

## WMATA FY2017 Capital Project Summary

### CIP0072 Elevator Rehabilitation

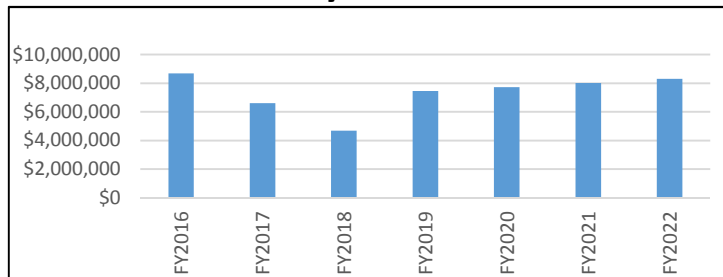
#### Project Description

This project rehabilitates the oldest and poorest performing elevators as necessary to maintain elevator safety, availability and reliability. The elevators are rehabilitated with energy saving devices.

#### Deliverables

1) Rehabilitate 15 elevators, planned locations include: Columbia Heights, Clarendon, Shady Grove, Medical Center, Archives, New Carrollton, Naylor Rd., Franconia Springfield, Brentwood, Deanwood, Brookland, Pentagon, Southern Ave., Farragut North and Virginia Square

#### Financial Summary



#### Milestones

1) Ongoing rehabilitation project with milestones completed as contract requires

#### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	4,987	2,108	2,219	2,478	2,602	2,733	2,870	3,016	18,026	23,013
Non-Personnel	18,600	6,588	4,396	2,220	4,847	4,993	5,142	5,297	33,483	52,083
<b>Total Budget</b>	<b>23,587</b>	<b>8,696</b>	<b>6,615</b>	<b>4,698</b>	<b>7,449</b>	<b>7,725</b>	<b>8,013</b>	<b>8,312</b>	<b>51,509</b>	<b>75,095</b>

#### Planned Funding Sources

As of 12/16/2015	FY2017
PRIIA	6,615
<b>Total</b>	<b>6,615</b>

Original FY11-FY16 Cost	Current FY11 - FY16 Cost
13,067	32,401

#### Variance Analysis

The project budget has been increased compared to previous years to include the recently awarded contract to rehabilitate 100 elevators over the next 10 years

## WMATA FY2017 Capital Project Summary

### CIP0073 Escalator Rehabilitation

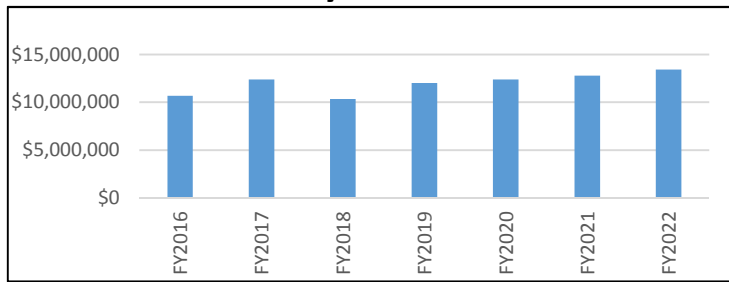
#### Project Description

This project rehabilitates and replaces escalators as necessary to maintain escalator availability, safety and reliability. The escalators are rehabilitated with energy saving devices.

#### Deliverables

1) Rehabilitate approximately 10 escalators. Specific locations to be determined before beginning of FY2017

#### Financial Summary



#### Milestones

1) Ongoing rehabilitation project with milestones completed as contract requires

#### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	6,283	1,399	1,250	1,176	1,235	1,293	1,358	1,665	9,375	15,658
Non-Personnel	50,706	9,278	11,145	9,186	10,780	11,103	11,436	11,779	74,706	125,412
<b>Total Budget</b>	<b>56,989</b>	<b>10,677</b>	<b>12,395</b>	<b>10,362</b>	<b>12,015</b>	<b>12,396</b>	<b>12,794</b>	<b>13,444</b>	<b>84,082</b>	<b>141,071</b>

#### Planned Funding Sources

As of 12/16/2015	FY2017
PRIIA	12,395
<b>Total</b>	<b>12,395</b>

Original FY11-FY16 Cost	Current FY11 - FY16 Cost
62,594	67,167

#### Variance Analysis

Increased expenditures due to upgrading Escalators with newer equipment which will require less maintenance and have lower long term operational cost; in addition to utility savings

## WMATA FY2017 Capital Project Summary CIP0076 Rail Power System Upgrades

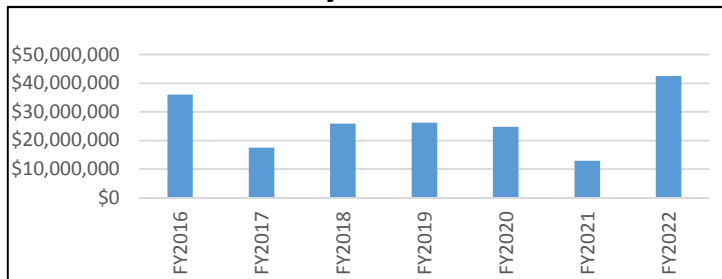
### Project Description

This project incrementally improves the traction-power system to increase power supply capacity to support the future expanded use of eight car trains. The increase from six to eight cars increases power requirements of each train as well as the load put on the traction-power system.

### Deliverables

- 1) Complete Six Tie Breaker Stations (TBS) upgrades on the Orange/Blue line
- 2) Two of these upgrades are NVTa funded (Greenwich and Prosperity Ave.)
- 3) Complete upgrades at remaining four locations: Ogden Street, Benning Road, 56th Place and 67th Avenue

### Financial Summary



### Milestones

- 1) Continue completion of 6 more Tie Breaker Stations (TBS) upgrades as part of ongoing system upgrade project

### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 - FY2022	
									FY2016 - FY2022	FY2011 - FY2022
Personnel	7,675	14,986	6,348	11,289	8,328	8,143	5,218	12,491	66,804	74,479
Non-Personnel	26,647	21,067	11,148	14,634	17,954	16,684	7,704	30,058	119,250	145,896
<b>Total Budget</b>	<b>34,321</b>	<b>36,054</b>	<b>17,496</b>	<b>25,924</b>	<b>26,282</b>	<b>24,827</b>	<b>12,922</b>	<b>42,549</b>	<b>186,054</b>	<b>220,375</b>

### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
Debt	17,496	29,016	70,454
<b>Total</b>	<b>17,496</b>		

### Variance Analysis

Increases in scope and deliverables resulted in increased costs



## WMATA FY2017 Capital Project Summary

### CIP0080 Building Infrastructure & Systems Renewal

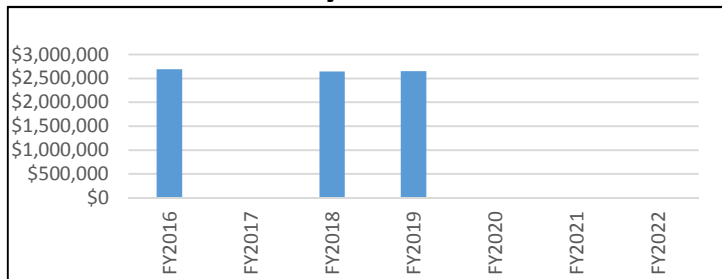
#### Project Description

This project rehabilitates, replaces and updates existing infrastructure, systems and other building assets including, but not limited to, building exterior envelope, HVAC, plumbing and electrical systems. The main goal of the project is to improve the utilization of work and support space while incorporating new technologies to improve efficiency in building operations. Investment locations include the Jackson Graham Building (JGB) and other facilities as needed for temporary staff relocation during construction (swing space).

#### Deliverables

1) No FY2017 deliverables. Project resumes in FY2018.

#### Financial Summary



#### Milestones

1) No FY2017 milestones. Project resumes in FY2018

#### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 - FY2011 - FY2022	
									FY2022	FY2022
Personnel	240	296	0	200	204	0	0	0	700	940
Non-Personnel	19,076	2,396	0	2,444	2,445	0	0	0	7,284	26,360
<b>Total Budget</b>	<b>19,316</b>	<b>2,692</b>	<b>0</b>	<b>2,644</b>	<b>2,649</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>7,985</b>	<b>27,301</b>

#### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
<b>Total</b>	<b>0</b>	<b>3,608</b>	<b>22,045</b>

#### Variance Analysis

Project scope expanded as new infrastructure needs were identified

## WMATA FY2017 Capital Project Summary

# CIP0084 Southern Avenue Bus Garage Replacement

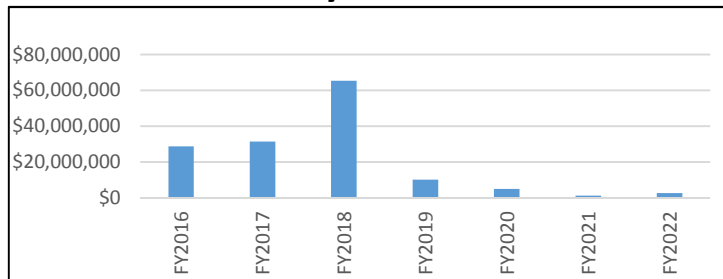
### Project Description

This project will replace the existing Southern Avenue Bus Garage with a fully modern Leadership in Energy and Environmental Design (LEED) Silver facility that can hold 175 buses. The existing facility is over 90 years old. This project also includes the construction of a new heavy repair and overhaul facility. The total estimated cost of this project is approximately \$132 million.

### Deliverables

- 1) Site Utilities installation complete - May 2017
- 2) Structural Framing and Decking construction complete - December 2016
- 3) Roofing Structural Installation complete - June 2017
- 4) Side Concrete Paving work complete - June 2017

### Financial Summary



### Milestones

- 1) Construction of new facility estimated completion - September 2018
- 2) Demolition of old Bus Garage to begin - January 2021
- 3) Demolition and remediation of old Bus Garage estimated completion - September 2023

### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	1,607	2,850	2,541	6,907	3,911	1,943	486	1,612	20,251	21,858
Non-Personnel	35,214	25,806	28,863	58,547	6,336	3,057	743	1,076	124,427	159,641
<b>Total Budget</b>	<b>36,821</b>	<b>28,656</b>	<b>31,404</b>	<b>65,454</b>	<b>10,247</b>	<b>5,000</b>	<b>1,229</b>	<b>2,688</b>	<b>144,678</b>	<b>181,499</b>

### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
Debt	31,404	113,258	65,864
<b>Total</b>	<b>31,404</b>		

### Variance Analysis

Due to delays in site selection and permitting process, the project expenditures have shifted to later years

## WMATA FY2017 Capital Project Summary

# CIP0085 Royal Street Bus Garage Replacement (Cinder Bed Road)

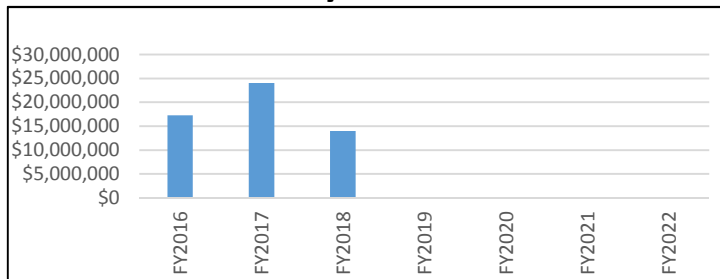
### Project Description

This project is for the replacement of the existing Royal Street Bus Garage with a fully modern Leadership in Energy and Environmental Design (LEED) Silver facility at Cinder Bed Road, with a capacity of 160 buses. The existing facility is over 70 years old.

### Deliverables

- 1) Site Sanitary & Water Utilities installation to begin December 2015
- 2) Begin installation of Building Site Electrical - February 2016
- 3) Install Fuel Storage Tanks at Fueling Station - April 2016

### Financial Summary



### Milestones

- 1) Construction sitework begun November 2015
- 2) Garage Commissioning estimated - July 2017
- 3) Project Closeout December 2017

### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	1,708	2,880	3,188	1,680	0	0	0	0	7,748	9,456
Non-Personnel	27,046	14,370	20,868	12,320	0	0	0	0	47,557	74,603
<b>Total Budget</b>	<b>28,754</b>	<b>17,249</b>	<b>24,056</b>	<b>14,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>55,305</b>	<b>84,059</b>

### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
Debt	24,056	98,779	45,735
<b>Total</b>	<b>24,056</b>		

### Variance Analysis

Due to permitting delays and litigation that has now been resolved, project schedule and costs have shifted to later years

## WMATA FY2017 Capital Project Summary CIP0086 Shepherd Parkway Bus Facility

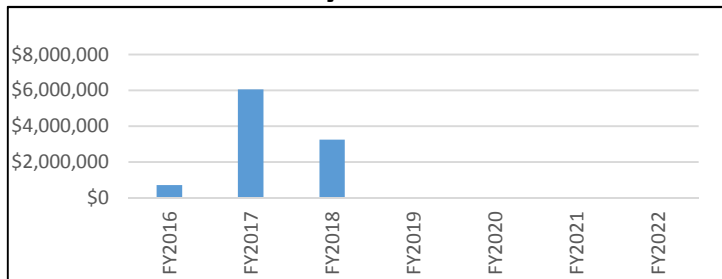
### Project Description

This project will install CNG fueling equipment at Shepherd Parkway Bus Garage. The new equipment will enable the Sheperd Parkway facility to service the CNG Bus fleet and allow for future expansion of the CNG fleet.

### Deliverables

- 1) Notice to Proceed for Design work March 2016, estimated completion November 2016
- 2) Sitework expected to begin January 2017

### Financial Summary



### Milestones

- 1) CNG Equipment and stations installation expected to be complete June 2018
- 2) Project closeout December 2018

### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	64	114	609	336	0	0	0	0	1,059	1,123
Non-Personnel	1,920	597	5,452	2,918	0	0	0	0	8,967	10,887
<b>Total Budget</b>	<b>1,984</b>	<b>711</b>	<b>6,061</b>	<b>3,254</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10,026</b>	<b>12,010</b>

### Planned Funding Sources

As of 12/16/2015	FY2017
Federal Formula	6,061
<b>Total</b>	<b>6,061</b>

Original FY11-FY16 Cost	Current FY11 - FY16 Cost
51,396	2,671

### Variance Analysis

Project funding planned for CIP0086 was replaced by proceeds from the sale of a property and construction of the facility was completed through a reimbursable project

## WMATA FY2017 Capital Project Summary CIP0087 Station Rehabilitation Program

### Project Description

Twenty-four stations are scheduled for rehabilitation every year which results in each station receiving rehabilitation every four years. This project consists of a thorough cleaning and power washing of all concrete and architectural features; repairs to doors, railings, paver tiles, granite surfaces, shelters, benches and signage. Also included are the painting of walls, railings, fare machines, ceiling coffer panels, doors, light poles, entrance gates, platform shelters and other metal surfaces.

### Deliverables

1) Twelve major and twelve minor station rehabilitations are scheduled for FY2017 which include: Masonry surfaces cleaning/restoration, Shelters repairs including replacement of bench boards, glass, paint etc., Metallic surfaces refinished i.e. painted or re-bronzed, Station Graphics repaired/replaced, Escalator landing plates resurfaced, Masonry repaired or replaced as required and Doors repaired or replaced as needed

2) Specific station workplan to be determined prior to start of FY2017

### Financial Summary



### Milestones

1) September: 6 Stations to be completed  
 2) December- 6 Stations to be completed  
 3) March - 6 Stations to be completed  
 4) June - 6 Stations to be completed

### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	44,399	8,928	10,704	11,557	11,563	11,563	11,562	11,562	77,439	121,838
Non-Personnel	787	203	220	238	232	232	233	233	1,592	2,378
<b>Total Budget</b>	<b>45,185</b>	<b>9,131</b>	<b>10,925</b>	<b>11,795</b>	<b>11,795</b>	<b>11,795</b>	<b>11,795</b>	<b>11,795</b>	<b>79,031</b>	<b>124,217</b>

### Planned Funding Sources

As of 12/16/2015	FY2017
State of Good Repair	10,925
<b>Total</b>	<b>10,925</b>

Original FY11-FY16 Cost	Current FY11 - FY16 Cost
48,151	55,304

### Variance Analysis

Cost increases in this project are due to increased labor and material costs

## WMATA FY2017 Capital Project Summary CIP0088 Station Entrance Canopies

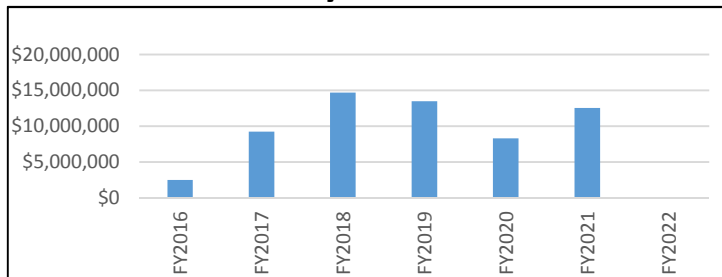
### Project Description

This project provides for the installation of canopies over 11 station entrances with exposed escalators to protect both riders and escalators from weather. Canopies will aid in maintaining the State of Good Repair of escalators at selected stations.

### Deliverables

- 1) FY2017 Start and Complete Installation at Metro Center Station
- 2) July 2016 Brookland Station (east), canopy installation to begin
- 3) July 2016 Shady Grove Station installation to begin
- 4) Brookland (east) and Shady Grove canopies to be completed in FY2018

### Financial Summary



### Milestones

- 1) FY2018 Installation start at Deanwood, Smithsonian, Judiciary Square, Minnesota Ave. and Gallery Place
- 2) FY2019 Canopies complete at Deanwood, Gallery Place, Smithsonian, Judiciary Sq. and Minnesota Ave.
- 3) FY2019 Begin Installation at Smithsonian (north) and Dupont Circle, to be completed in FY2020

### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	501	160	218	367	358	230	357	0	1,690	2,191
Non-Personnel	1,747	2,340	9,044	14,323	13,131	8,062	12,192	0	59,092	60,839
<b>Total Budget</b>	<b>2,248</b>	<b>2,500</b>	<b>9,261</b>	<b>14,691</b>	<b>13,489</b>	<b>8,292</b>	<b>12,549</b>	<b>0</b>	<b>60,782</b>	<b>63,030</b>

### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
Debt	9,261	10,281	4,748
<b>Total</b>	<b>9,261</b>		

### Variance Analysis

Delays in project initiation have caused scheduled expenditures to shift into later years. Significant expenditures in FY2017 - FY2021

## WMATA FY2017 Capital Project Summary

### CIP0093 Integrating regional NEXTFARE System

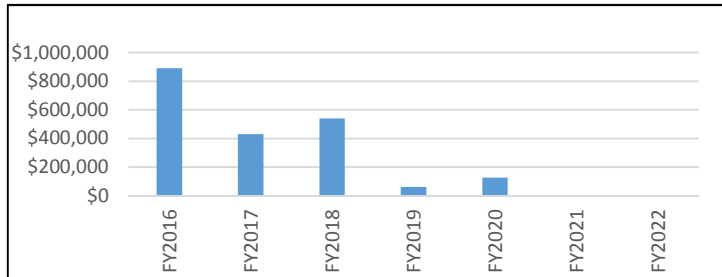
#### Project Description

This project replaces and upgrades the regional fare collection system and develops an active backup database for the Fare Collection System Central Computer infrastructure. This project also includes the installation and maintenance of Compact Point of Sale units, the installation of SmarTrip(R) Card Dispensers throughout the system, labor to support the conversion of the Farecard Express Reload Machine Vendors (Paper Farecards) to SmarTrip(R) Sale and Reload Machines that vend reusable SmarTrip(R) cards.

#### Deliverables

- 1) Continuation of fare collection equipment updates
- 2) Support installation of the Gen. III Tri-card readers for SmarTrip(R) cards
- 3) Improvement to system to address Fare evasion

#### Financial Summary



#### Milestones

- 1) FY2017 - Complete migration to Generation III Tri-Card readers for SmarTrip(R) cards

#### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	4,417	397	95	34	35	57	0	0	618	5,035
Non-Personnel	19,377	495	335	505	29	69	0	0	1,433	20,810
<b>Total Budget</b>	<b>23,794</b>	<b>892</b>	<b>430</b>	<b>539</b>	<b>63</b>	<b>126</b>	<b>0</b>	<b>0</b>	<b>2,051</b>	<b>25,845</b>

#### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
Federal Formula	430	6,341	24,811
<b>Total</b>	<b>430</b>		

#### Variance Analysis

Project scope expanded to include SmarTrip(R) migration and dispenser upgrades, Compact Point of Sale installations and Multipurpose Point of Sale expansion

## WMATA FY2017 Capital Project Summary CIP0097 New Electronic Payments Program

### Project Description

This project will replace and upgrade the existing fare system.

### Deliverables

1) Continue efforts to replace and upgrade the existing fare collection system

### Financial Summary



### Milestones

### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	4,199	2,660	1,948	2,946	6,875	2,340	664	0	17,433	21,632
Non-Personnel	17,699	27,874	19,458	30,842	42,955	32,895	9,077	0	163,101	180,800
<b>Total Budget</b>	<b>21,898</b>	<b>30,534</b>	<b>21,406</b>	<b>33,788</b>	<b>49,830</b>	<b>35,235</b>	<b>9,741</b>	<b>0</b>	<b>180,534</b>	<b>202,432</b>

### Planned Funding Sources

As of 12/16/2015	FY2017
Federal Formula	21,406
<b>Total</b>	<b>21,406</b>

Original FY11-FY16 Cost	Current FY11 - FY16 Cost
15,912	52,487

### Variance Analysis

--



## WMATA FY2017 Capital Project Summary

### CIP0099 Police Emergency Management Equipment

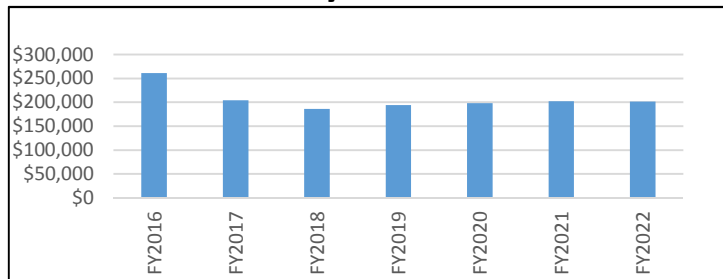
#### Project Description

This project upgrades WMATA facilities to support rescue and recovery operations. Additionally, this project funds the purchase, repair or replacement of damaged or obsolete rescue and recovery support equipment.

#### Deliverables

1) Carmen Turner Facility Tunnel Upgrades - Series 1000 Railcar replacement with Series 7000 Railcar simulator. The Tunnel simulator is used for training tactical teams, rapid response teams and first responders in an actual railcar setting.

#### Financial Summary



#### Milestones

- 1) Automatic Electric Defibrillator (AED) Units Life Cycle replacement - FY2018
- 2) Mobile Emergency Response Vehicle (MERV) Life Cycle replacement - FY2019
- 3) Third Rail Warning Device (WASD) Life cycle replacement - FY2020

#### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	312	12	26	0	0	0	0	0	38	350
Non-Personnel	1,269	249	178	186	194	198	202	201	1,409	2,679
<b>Total Budget</b>	<b>1,581</b>	<b>261</b>	<b>204</b>	<b>186</b>	<b>194</b>	<b>198</b>	<b>202</b>	<b>201</b>	<b>1,448</b>	<b>3,029</b>

#### Planned Funding Sources

As of 12/16/2015	FY2017
Federal Formula	204
<b>Total</b>	<b>204</b>

Original FY11-FY16 Cost	Current FY11 - FY16 Cost
981	1,844

#### Variance Analysis

Project delivery expanded to modernize existing equipment

## WMATA FY2017 Capital Project Summary

### CIP0102 Police Substation (Northern Virginia)

#### Project Description

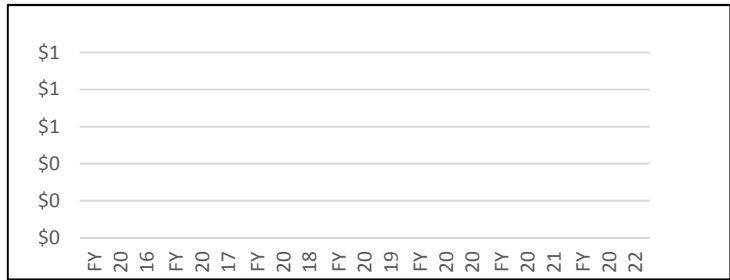
This project will begin the planning and design of a new police substation in Northern Virginia to provide police coverage primarily for the Silver Line.

#### Deliverables

Project on Hold

Project on Hold

#### Financial Summary



#### Milestones

Project on Hold

Project on Hold

#### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 - FY2022	
									FY2016 - FY2022	FY2011 - FY2022
Personnel	0	0	0	0	0	0	0	0	0	0
Non-Personnel	0	0	0	0	0	0	0	0	0	0
<b>Total Budget</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

#### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
<b>Total</b>	<b>0</b>	<b>0</b>	

#### Variance Analysis

--

## WMATA FY2017 Capital Project Summary CIP0103 Police Portable Radio Replacement

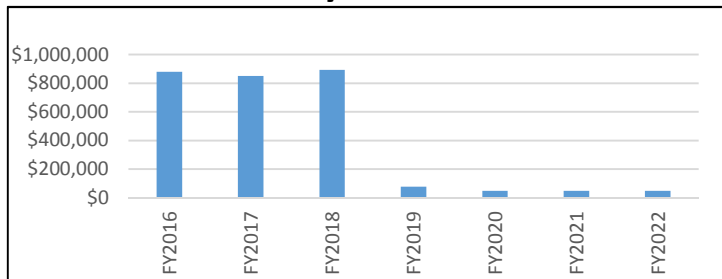
### Project Description

This project purchases replacement police radios based upon a useful lifecycle and new radios for department growth. Additionally, this project supports the maintenance and upkeep of 450 handheld radio units, 100 Mobile Dash mounted radio units and 75 multiband radio units for communication with other jurisdictions.

### Deliverables

- 1) Receive 150 Handheld Radio Equipment - September 2016
- 2) Set Up and Replace Radio Equipment - November 2016
- 3) User Acceptance Testing / QA testing - January 2017

### Financial Summary



### Milestones

- 1) Radio Replacement Project Closeout - April 2017

### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 - FY2022	
									FY2016 - FY2022	FY2011 - FY2022
Personnel	0	42	0	0	0	0	0	0	42	42
Non-Personnel	1,989	838	850	894	78	48	48	48	2,805	4,793
<b>Total Budget</b>	<b>1,989</b>	<b>880</b>	<b>850</b>	<b>894</b>	<b>78</b>	<b>48</b>	<b>48</b>	<b>48</b>	<b>2,847</b>	<b>4,836</b>

### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
Federal Formula	850	2,675	2,873
<b>Total</b>	<b>850</b>		

### Variance Analysis

No significant change

## WMATA FY2017 Capital Project Summary CIP0108 Red Line Rehabilitation Stage Two

### Project Description

This project is the second stage of a comprehensive rehabilitation of the Red Line and will focus on rebuilding systems and infrastructure. Work will be divided into smaller phases and awarded separately. The first phase will include: Waterproofing at the Medical Center crossover, tunnel rehabilitation and station ceiling replacement at Medical Center, retrofitting of the Grosvenor aerial structure, tile and platform rehabilitation and roof retrofit at Grosvenor-Strathmore, and a new south mezzanine at Bethesda. Additional phases being planned to extend beyond FY2022.

### Deliverables

- 1) Complete design and award contract for waterproofing at the Medical Center crossover
- 2) Complete design for tile and platform rehabilitation, as well as canopy and mezzanine roof retrofit at Grosvenor-Strathmore
- 3) Design tunnel rehabilitation and station ceiling replacement at Medical Center
- 4) Finish design for new south mezzanine at Bethesda.

### Financial Summary



### Milestones

- 1) Award the contract for the first phase and finalize a cost loaded schedule (FY2017)

### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	1,953	1,795	3,326	6,053	2,646	2,722	2,749	9,097	28,389	30,342
Non-Personnel	5,074	3,205	6,674	11,441	6,807	7,840	8,203	17,440	61,611	66,685
<b>Total Budget</b>	<b>7,027</b>	<b>5,000</b>	<b>10,000</b>	<b>17,494</b>	<b>9,453</b>	<b>10,562</b>	<b>10,953</b>	<b>26,537</b>	<b>90,000</b>	<b>97,027</b>

### Planned Funding Sources

As of 12/16/2015	FY2017
State of Good Repair	6,202
Local	3,798
<b>Total</b>	<b>10,000</b>

Original FY11-FY16 Cost	Current FY11 - FY16 Cost
144,622	12,198

### Variance Analysis

Red Line Stage Two contract was originally planned to begin in FY2014, however the project was delayed as lessons learned from the stage one contract were evaluated

## WMATA FY2017 Capital Project Summary

# CIP0110 Orange/Blue Line Rehabilitation Stage One

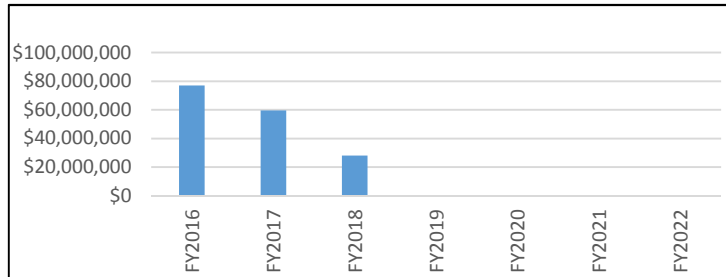
### Project Description

This project is the first stage of a comprehensive rehabilitation of the Orange and Blue Lines that will focus on rebuilding systems and infrastructure to extend useful life and improve reliability of the Metro system.

### Deliverables

- 1) Replacement of equipment in AC switchboard rooms (11 locations)
- 2) Replacement of Motor Control Centers (25 locations).  
Replacement of kiosks (7 stations)
- 3) Replacement of equipment in Traction Power Substations (11 locations)
- 4) Replacement of Exhaust and vent fans (15 locations).  
Emergency Trip Station replacement (12 locations).

### Financial Summary



### Milestones

- 1) Construction to be completed by Q4 of FY2017
- 2) Close-out of contract in FY2018

### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	70,927	23,835	18,929	16,218	0	0	0	0	58,982	129,909
Non-Personnel	187,501	53,157	40,576	11,808	0	0	0	0	105,541	293,042
<b>Total Budget</b>	<b>258,428</b>	<b>76,992</b>	<b>59,505</b>	<b>28,026</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>164,523</b>	<b>422,951</b>

### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
State of Good Repair	2,972	401,872	338,812
Debt	56,533		
<b>Total</b>	<b>59,505</b>		

### Variance Analysis

Delays in contract and work schedule.  
Work plan extended beyond FY2016

## WMATA FY2017 Capital Project Summary

### CIP0116 Rail Yard Facility Repairs

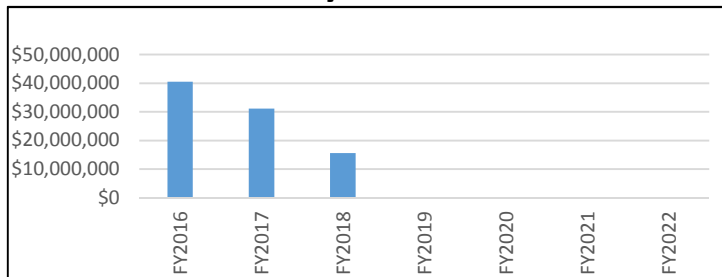
#### Project Description

This project is for the rehabilitation of Alexandria, Brentwood and New Carrollton Rail yards that were put into service between 1976 and 1983. The scope of work varies across the facilities and rehabilitation work will include all systems and infrastructure to increase overall efficiency. Safety hazard corrections and emergency rehabilitation work at other rail yards will be done as needed. Rehabilitation of the railcar lifts at rail yards is also included.

#### Deliverables

- 1) Major rehab and construction work to be performed at Alexandria Service and Inspection (S&I) Shop
- 2) Major rehab and construction work to be performed at Alexandria Track and Structures (TRST) Building
- 3) Major rehab and construction work to be performed at Brentwood Service and Inspection (S&I) Shop
- 4) Includes HVAC equipment replacement, electrical, lighting and shop space work.

#### Financial Summary



#### Milestones

- 1) Construction to be completed by Q4 of FY2017
- 2) Close-out of contract in FY2018

#### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	19,236	7,732	6,119	4,193	0	0	0	0	18,044	37,279
Non-Personnel	62,387	32,768	25,063	11,413	0	0	0	0	69,244	131,631
<b>Total Budget</b>	<b>81,622</b>	<b>40,500</b>	<b>31,182</b>	<b>15,606</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>87,288</b>	<b>168,910</b>

#### Planned Funding Sources

As of 12/16/2015	FY2017
PRIIA	31,182
<b>Total</b>	<b>31,182</b>

Original FY11-FY16 Cost	Current FY11 - FY16 Cost
155,755	122,798

#### Variance Analysis

Reduced expenditures experienced due to delays in contract and work schedule. Work plan expanded beyond FY2016

## WMATA FY2017 Capital Project Summary CIP0119 Bus Garage Facility Repairs

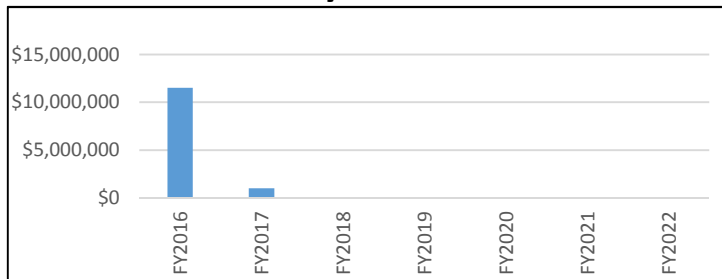
### Project Description

This project is a bus and auxiliary facility rehabilitation program. Some of the locations supported under this CIP are: Western, Northern and Landover Bus garages, Metro Supply Facility, Landover Open Storage and other auxiliary facilities. Rehabilitation will include infrastructure design and construction work to increase overall efficiency, replace worn or obsolete equipment, improve safety, improve employee productivity, repair structures, add capacity and capabilities for the maintenance of revenue buses. This project also improves security systems and components at Bus and auxiliary facilities.

### Deliverables

1) Project construction to be completed in FY2016. Close-out is scheduled for FY2017

### Financial Summary



### Milestones

1) Project close-out in FY2017

### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	12,852	1,750	152	0	0	0	0	0	1,903	14,754
Non-Personnel	82,309	9,761	848	0	0	0	0	0	10,609	92,917
<b>Total Budget</b>	<b>95,160</b>	<b>11,511</b>	<b>1,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>12,511</b>	<b>107,672</b>

### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
Local	1,000	144,957	107,770
<b>Total</b>	<b>1,000</b>		

### Variance Analysis

Some project elements descoped to pursue other capital investment needs.

## WMATA FY2017 Capital Project Summary

### CIP0126 Financial Planning, Project Admin. & Infrastructure Improv.

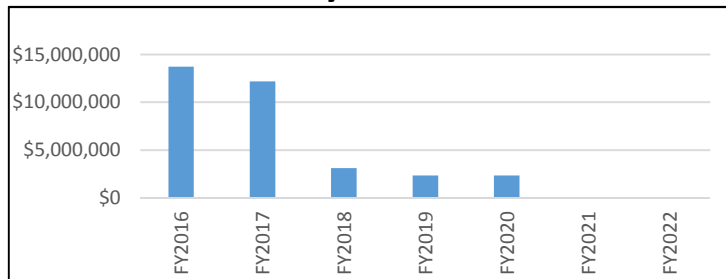
#### Project Description

This project provides support for capital program management, professional services and grant administration improvements.

#### Deliverables

- 1) Professional and engineering services for program wide tasks
- 2) Compliance activities for Grant management

#### Financial Summary



#### Milestones

#### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	2,699	1,491	711	187	144	152	0	0	2,686	5,385
Non-Personnel	31,797	12,238	11,489	2,933	2,196	2,188	0	0	31,043	62,840
<b>Total Budget</b>	<b>34,496</b>	<b>13,729</b>	<b>12,200</b>	<b>3,120</b>	<b>2,340</b>	<b>2,340</b>	<b>0</b>	<b>0</b>	<b>33,729</b>	<b>68,226</b>

#### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
Local	12,050	15,146	32,051
<b>Total</b>	<b>12,050</b>		

#### Variance Analysis

FY2014 Project scope expanded to support various Engineering and Program Management tasks previously allocated across entire Capital program



## WMATA FY2017 Capital Project Summary CIP0127 Support Equipment - MTPD

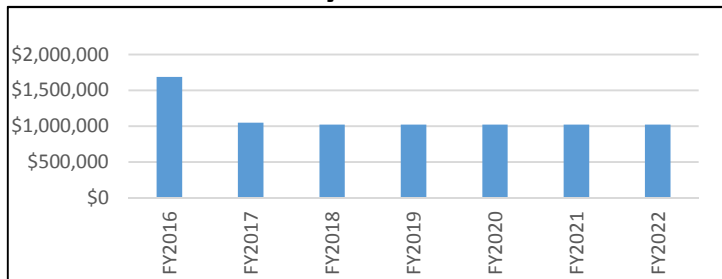
### Project Description

This project upgrades storage and training facilities to support the Police and houses law enforcement equipment and repairs or replaces damaged or obsolete equipment used to support law enforcement.

### Deliverables

- 1) Facility Security Improvements complete - June 2017
- 2) Police Patrol Equipment Upgrade complete - June 2016

### Financial Summary



### Milestones

- 1) Facility Security Hardening project complete - June 2017
- 2) FY2018 - FY2020 Ongoing replacement of personal protective gear, force instruments and restraint equipment

### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	539	412	25	25	25	26	26	27	566	1,105
Non-Personnel	6,641	1,274	1,025	997	997	997	997	997	7,284	13,926
<b>Total Budget</b>	<b>7,181</b>	<b>1,686</b>	<b>1,050</b>	<b>1,022</b>	<b>1,022</b>	<b>1,023</b>	<b>1,023</b>	<b>1,024</b>	<b>7,851</b>	<b>15,031</b>

### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
Federal Formula	1,050	6,192	9,735
<b>Total</b>	<b>1,050</b>		

### Variance Analysis

Project delivery expanded to modernize existing equipment including: personal protective gear, force instruments and restraint equipment

## WMATA FY2017 Capital Project Summary

### CIP0128 Data Governance and Business Intelligence

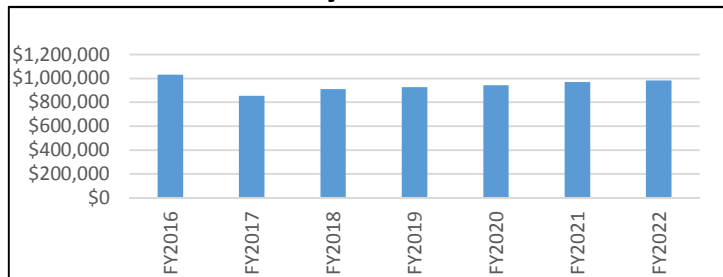
#### Project Description

This project implements business intelligence reporting and analytics that include historical trending and graphical capabilities for viewing and integrating data utilized for reporting and analysis across different data sources. This project also establishes policies and processes for achieving data governance that involves the business control of key data elements and how enterprise metrics are computed.

#### Deliverables

- 1) Completion of Business Intelligence integration of Maximo, PeopleSoft and Nextfare systems
- 2) Development of Automated Customer Travel Time performance metric and Individualized Dashboard for SmarTrip users
- 3) Build Data Repository for relational and dimensional analytics across the three platforms
- 4) Develop Transit Infrastructure and Engineering Services (TIES) Performance Management dashboard

#### Financial Summary



#### Milestones

- 1) FY2017 - Complete Customer Travel Time App analysis
- 2) FY2017 - Complete TIES Performance Management Dashboard

#### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	402	49	449	588	600	552	626	636	3,500	3,902
Non-Personnel	4,706	984	406	322	328	393	343	348	3,123	7,829
<b>Total Budget</b>	<b>5,108</b>	<b>1,033</b>	<b>855</b>	<b>910</b>	<b>928</b>	<b>944</b>	<b>969</b>	<b>984</b>	<b>6,623</b>	<b>11,731</b>

#### Planned Funding Sources

As of 12/16/2015	FY2017
Federal Formula	855
<b>Total</b>	<b>855</b>

Original FY11-FY16 Cost	Current FY11 - FY16 Cost
0	6,161

#### Variance Analysis

Project initiated FY2012

## WMATA FY2017 Capital Project Summary CIP0131 Credit Facility

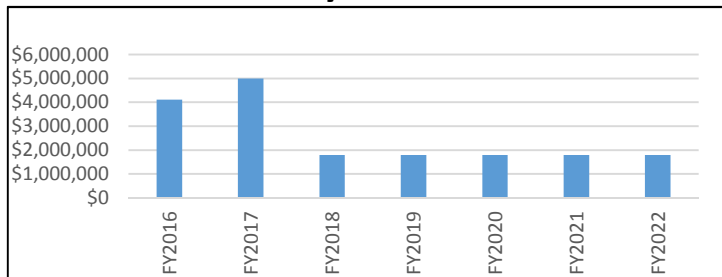
### Project Description

This project funds the lines of credit and interim financing costs necessary to finance capital program cash flow needs.

### Deliverables

1) Maintenance of ongoing Lines of Credit for short term funding needs

### Financial Summary



### Milestones

1) No milestones, payments for ongoing line of credit

### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	0	196	0	0	0	0	0	0	196	196
Non-Personnel	8,050	3,920	5,000	1,800	1,800	1,800	1,800	1,800	17,920	25,970
<b>Total Budget</b>	<b>8,050</b>	<b>4,116</b>	<b>5,000</b>	<b>1,800</b>	<b>1,800</b>	<b>1,800</b>	<b>1,800</b>	<b>1,800</b>	<b>18,116</b>	<b>26,166</b>

### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
Local	5,000	36,000	12,166
<b>Total</b>	<b>5,000</b>		

### Variance Analysis

Prior to FY2014, short term funding needs lower than originally anticipated

## WMATA FY2017 Capital Project Summary CIP0132 Elevator/Escalator Repairables

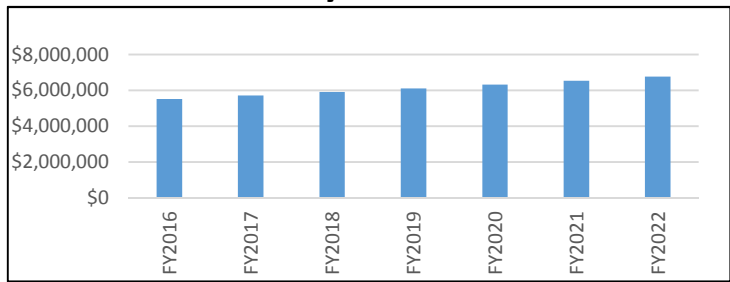
### Project Description

This project provides the capital repairs, upgrades and replacement components for elevators and escalators beyond repair.

### Deliverables

1) Refurbish approximately 6,200 steps, 170 speed reducers and 240 brake boards. Degrease, clean & deodorize approximately 300 escalators/wellways and 150 elevators/hoistways. Purchase approximately 4,804 new escalator steps

### Financial Summary



### Milestones

### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	11,375	1,048	1,493	1,562	1,633	1,709	1,788	1,872	11,105	22,480
Non-Personnel	17,475	4,476	4,222	4,348	4,479	4,613	4,751	4,894	31,783	49,258
<b>Total Budget</b>	<b>28,850</b>	<b>5,524</b>	<b>5,715</b>	<b>5,910</b>	<b>6,112</b>	<b>6,322</b>	<b>6,539</b>	<b>6,765</b>	<b>42,888</b>	<b>71,737</b>

### Planned Funding Sources

As of 12/16/2015	FY2017
State of Good Repair	5,715
<b>Total</b>	<b>5,715</b>

Original FY11-FY16 Cost	Current FY11 - FY16 Cost
29,027	34,334

### Variance Analysis

Project costs have increased incrementally through each fiscal year as a result of increasing material and contract costs

## WMATA FY2017 Capital Project Summary

### CIP0133 Wayside Equipment - Portal Warning

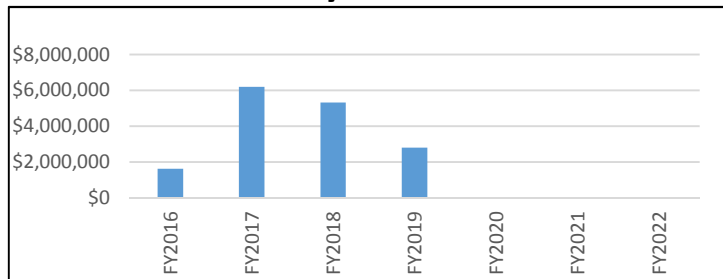
#### Project Description

This project will install a safety signaling system at rail portals and other locations to alert personnel of approaching trains. This project will also develop a warning system to alert train operators about the presence of workers on the wayside.

#### Deliverables

- 1) Complete Portal Approach Warning System (PAWS) at 5 of 19 locations, begin working on the 6th location
- 2) Complete worker warning system
- 3) Complete installation of warning system at 2 of the 4 remaining car wash locations in Railyards

#### Financial Summary



#### Milestones

- 1) 5 of 19 Portal Approach Warning Systems (PAWS) completed
- 2) Complete warning system at 2 of 4 car wash locations in the railyards

#### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	3,706	1,125	4,043	3,803	2,157	0	0	0	11,128	14,834
Non-Personnel	6,227	505	2,153	1,514	645	0	0	0	4,818	11,045
<b>Total Budget</b>	<b>9,933</b>	<b>1,630</b>	<b>6,196</b>	<b>5,317</b>	<b>2,803</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>15,946</b>	<b>25,879</b>

#### Planned Funding Sources

As of 12/16/2015	FY2017
State of Good Repair	6,196
<b>Total</b>	<b>6,196</b>

Original FY11-FY16 Cost	Current FY11 - FY16 Cost
11,328	11,607

#### Variance Analysis

No significant cost change

## WMATA FY2017 Capital Project Summary

### CIP0136 Radio & Cellular Infrastructure Renewal Project

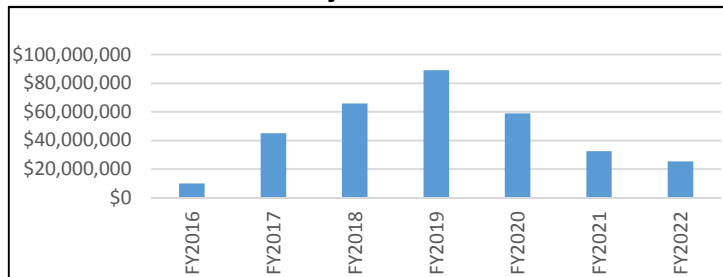
#### Project Description

This project will replace the existing WMATA Comprehensive Radio Communications System (CRCS) operating in 450-490 MHz frequency band (also referred to as T-Band) with a new system operating in the 700 MHz band, as required by the new Federal Communications Commission (FCC) T-Band relocation requirement that affects the agency's Ultra High Frequency radio system. This project also maintains the current CRCS in working order until the frequencies are secured and replaced.

#### Deliverables

- 1) Complete construction of JGB ROCC & BOCC improvements
- 2) Complete DAS cable tray and cable installation for both 700 / 800 MHz Radio and Neutral Host on Red Line
- 3) Begin construction 700MHz / 800MHz Metro Box Enclosures
- 4) Complete design of above ground radio system.

#### Financial Summary



#### Milestones

- 1) JGB and ROCC improvements completed
- 2) Cable trays completed on Red Line
- 3) Design work for above ground implementation completed

#### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	1,136	2,563	4,785	4,713	5,570	5,112	4,871	5,050	32,664	33,800
Non-Personnel	6,234	7,497	40,215	61,211	83,459	53,731	27,796	20,475	294,384	300,618
<b>Total Budget</b>	<b>7,370</b>	<b>10,060</b>	<b>45,000</b>	<b>65,924</b>	<b>89,030</b>	<b>58,843</b>	<b>32,667</b>	<b>25,525</b>	<b>327,048</b>	<b>334,418</b>

#### Planned Funding Sources

As of 12/16/2015	FY2017
PRIIA	45,000
<b>Total</b>	<b>45,000</b>

Original FY11-FY16 Cost	Current FY11 - FY16 Cost
20,797	17,594

#### Variance Analysis

No significant change in FY2011-FY2016 time period. Substantial investment in FY2017-FY2022.

## WMATA FY2017 Capital Project Summary

# CIP0139 National Transportation Safety Board Recommendations

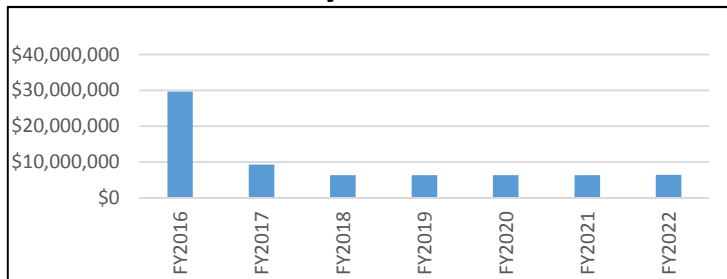
### Project Description

This project implements National Transportation Safety Board (NTSB) recommended safety improvements, corrective action plans, assessments and testing for systemwide implementation.

### Deliverables

- 1) Replace 108 GRS Gen 2 ATP Modules, includes a weekend shutdown at Navy Yard
- 2) Completion and close-out of program to monitor event recorder NTSB project
- 3) Exercise extended engineering support and project management for Onboard Event Recorders

### Financial Summary



### Milestones

- 1) Allocated to sub-projects

### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	72,836	9,394	2,052	2,933	2,935	2,936	2,938	2,939	26,127	98,964
Non-Personnel	107,524	20,244	7,230	3,432	3,434	3,436	3,437	3,439	44,652	152,177
<b>Total Budget</b>	<b>180,361</b>	<b>29,638</b>	<b>9,282</b>	<b>6,366</b>	<b>6,369</b>	<b>6,372</b>	<b>6,375</b>	<b>6,378</b>	<b>70,779</b>	<b>251,140</b>

### Planned Funding Sources

As of 12/16/2015	FY2017
PRIIA	6,500
<b>Total</b>	<b>6,500</b>

Original FY11-FY16 Cost	Current FY11 - FY16 Cost
30,871	212,350

### Variance Analysis

Project scope expanded to address NTSB recommendations and SMI requirements

## WMATA FY2017 Capital Project Summary CIP0139\_06 Replace GRS Track Circuits

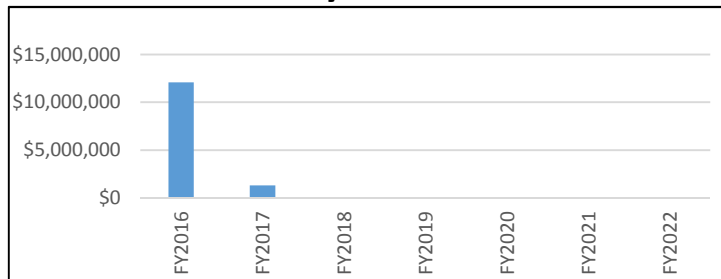
### Project Description

Due to the susceptibility of pulse-type parasitic oscillation that can cause a loss of train detection by the Generation 2 General Railway Signal Company audio frequency track circuit modules, this project establishes a program to permanently remove all of that specific type of module from the Metrorail system. This project addresses NTSB recommendation R-10-08 and FTA SMI R-8-43-a

### Deliverables

1) Replace 108 GRS GEN II ATP Modules; Includes one planned weekend shutdown at F05 (Navy Yard)

### Financial Summary



### Milestones

1) Contract Completion October 2016

2) Complete the replacement of 1727 GRS GEN II ATP Modules (NTSB Finding Closed out)

### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	22,969	3,835	412	0	0	0	0	0	4,247	27,216
Non-Personnel	48,809	8,265	888	0	0	0	0	0	9,153	57,962
<b>Total Budget</b>	<b>71,779</b>	<b>12,100</b>	<b>1,300</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>13,400</b>	<b>85,179</b>

### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
PRIIA	1,300	0	83,879
<b>Total</b>	<b>1,300</b>		

### Variance Analysis

This project was not included in the original FY2011-FY2016 Capital Investment Plan, added in later years



## WMATA FY2017 Capital Project Summary

### CIP0139\_20 Program to Monitor Onboard Recorders

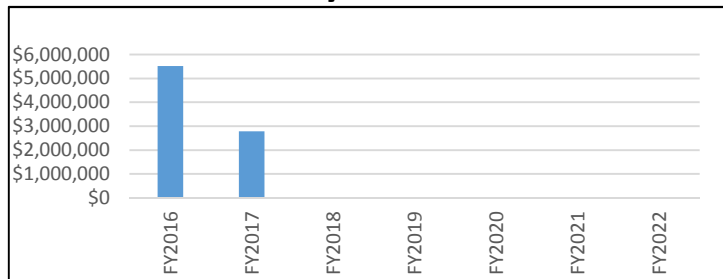
#### Project Description

This project will develop and implement a program to monitor onboard event recorders on rail cars. This project addresses NTSB recommendation R-10-22.

#### Deliverables

- 1) Implement software and hardware upgrades to VMS kits
- 2) Evaluate and upgrade existing PTU software platform

#### Financial Summary



#### Milestones

- 1) Complete delivery and installation of new software in FY2017

#### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 - FY2022	
									FY2016 - FY2022	FY2011 - FY2022
Personnel	480	1,748	882	0	0	0	0	0	2,630	3,110
Non-Personnel	1,020	3,767	1,900	0	0	0	0	0	5,668	6,687
<b>Total Budget</b>	<b>1,499</b>	<b>5,515</b>	<b>2,782</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>8,298</b>	<b>9,797</b>

#### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
PRIIA	2,782	0	6,825
<b>Total</b>	<b>2,782</b>		

#### Variance Analysis

This project was not included in the original FY2011-FY2016 Capital Investment Plan, added in later years

## WMATA FY2017 Capital Project Summary

### CIP0139\_S1 Critical/non-Critical notifications

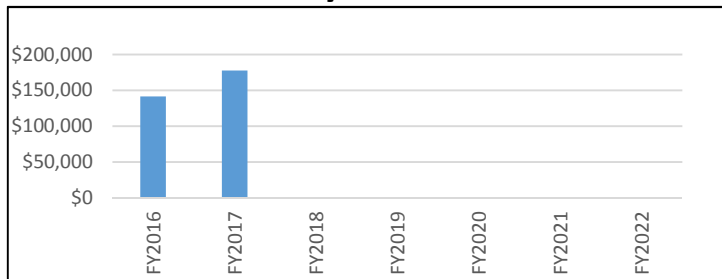
#### Project Description

WMATA must complete its assessment regarding the identification of critical versus non-critical notifications and alarms in the Rail Operations Control Center (ROCC). Additionally, this task evaluates and implements options for removing non-critical notifications within the ROCC. This project addresses FTA SMI R-1-4-a.

#### Deliverables

- 1) QAAW and SAFE Memorandum to be completed
- 2) Alarm Solution Report to be completed

#### Financial Summary



#### Milestones

- 1) Office of Quality Assurance & Warranty (QAAW) performs scope verification and inspection of CAP deliverables to ensure that all are completed as planned and expected

#### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	0	45	56	0	0	0	0	0	101	101
Non-Personnel	0	97	121	0	0	0	0	0	218	218
<b>Total Budget</b>	<b>0</b>	<b>142</b>	<b>178</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>319</b>	<b>319</b>

#### Planned Funding Sources

As of 12/16/2015	FY2017
PRIIA	178
<b>Total</b>	<b>178</b>

Original FY11-FY16 Cost	Current FY11 - FY16 Cost
319	319

#### Variance Analysis

Project initiated in FY2016

## WMATA FY2017 Capital Project Summary

### CIP0139\_S10 Tunnel Ventilation System Assessment

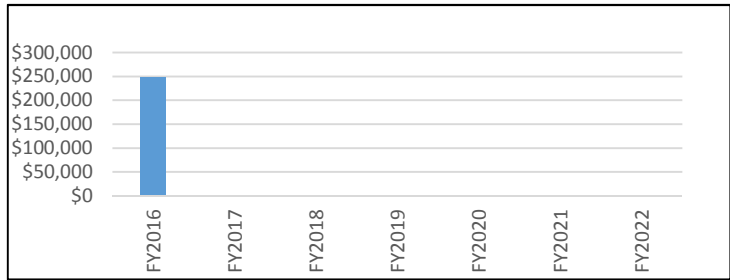
#### Project Description

WMATA's existing tunnel ventilation system was designed and installed before modern fire/life safety standards were issued for the rail transit environment. With growing passenger loads and eight-car trains, WMATA must look for opportunities to improve ventilation performance and capacity. This project addresses FTA SMI R-6-38-a

#### Deliverables

1) Develop final analysis report reviewing Action plan resulting from ventilation improvement study. Perform scope verification to ensure all issues are addressed

#### Financial Summary



#### Milestones

1) Award contract by Q2 FY2017 and begin construction. Install 72 control panels total  
2) Complete evaluation and training strategy initiatives for employee training and operations safety.

#### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 - FY2022	
									FY2016 - FY2022	FY2011 - FY2022
Personnel	0	79	0	0	0	0	0	0	79	79
Non-Personnel	0	169	0	0	0	0	0	0	169	169
<b>Total Budget</b>	<b>0</b>	<b>248</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>248</b>	<b>248</b>

#### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
<b>Total</b>	<b>0</b>	<b>248</b>	<b>248</b>

#### Variance Analysis

Project initiated in FY2016

## WMATA FY2017 Capital Project Summary

# CIP0139\_S11 Enterprise Learning Management System Evaluation

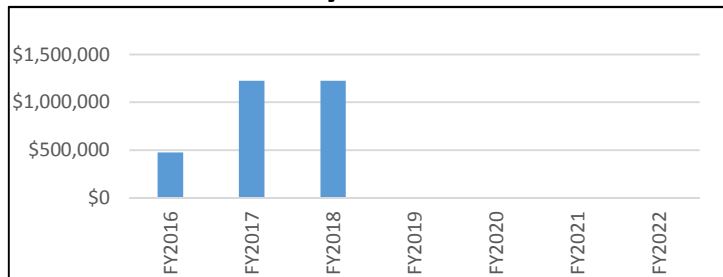
### Project Description

WMATA must evaluate the existing Enterprise Learning Management recordkeeping system and take corrective action as necessary, to ensure accurate training, re-certification and professional certification records are created, maintained and readily accessible to appropriate managers and employees. This project addresses FTA SMI R-7-39-a

### Deliverables

- 1) Develop employee Roles Report. Develop Qualifications Requirements Report
- 2) Perform Training Audit Process.

### Financial Summary



### Milestones

- 1) Submit to FTA for consideration of closure in FY2018.

### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	0	151	388	388	0	0	0	0	927	927
Non-Personnel	0	324	837	837	0	0	0	0	1,998	1,998
<b>Total Budget</b>	<b>0</b>	<b>475</b>	<b>1,225</b>	<b>1,225</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,925</b>	<b>2,925</b>

### Planned Funding Sources

As of 12/16/2015	FY2017
PRIIA	1,225
<b>Total</b>	<b>1,225</b>

Original FY11-FY16 Cost	Current FY11 - FY16 Cost
2,925	2,925

### Variance Analysis

Project initiated in FY2016

## WMATA FY2017 Capital Project Summary

### CIP0139\_S12 Maintenance Management System

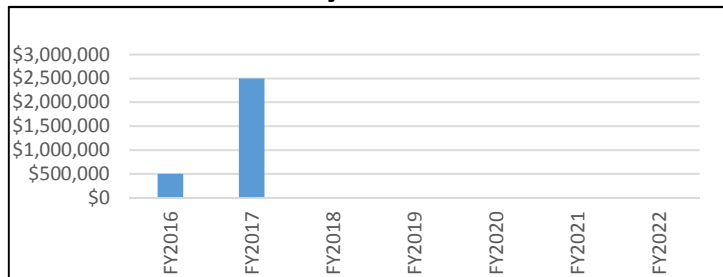
#### Project Description

WMATA must develop a training strategy for improving the capabilities of employees to enter, analyze and assess information into the agency's Maintenance Management Information System. This project addresses FTA SMI R-7-40-a/b/c

#### Deliverables

1) Complete conversation of business requirements into technical specifications Complete system design documents to map data flow of inter-operation between systems. Complete user acceptance testing and end-user training.

#### Financial Summary



#### Milestones

1) Submit to FTA for consideration of closure in FY2017.

#### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	0	158	791	0	0	0	0	0	949	949
Non-Personnel	0	342	1,704	0	0	0	0	0	2,046	2,046
<b>Total Budget</b>	<b>0</b>	<b>500</b>	<b>2,495</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,995</b>	<b>2,995</b>

#### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
PRIIA	2,495	2,995	2,995
<b>Total</b>	<b>2,495</b>		

#### Variance Analysis

Project initiated in FY2016

## WMATA FY2017 Capital Project Summary

### CIP0139\_S13 Training for AIMS

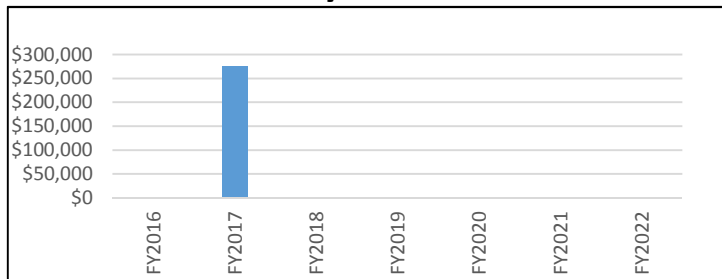
#### Project Description

WMATA's IT Department lacks necessary authority to ensure that all WMATA departments use IT applications in the same manner to ensure data sharing, coordination of training and to conduct audits in a consistent manner. This project addresses FTA SMI R-7-41-a

#### Deliverables

- 1) Complete development of software across all system
- 2) Complete user integration and user acceptance testing of all software systems.

#### Financial Summary



#### Milestones

- 1) Submit to FTA for consideration of closure in FY2017.

#### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	0	0	87	0	0	0	0	0	87	87
Non-Personnel	0	0	188	0	0	0	0	0	188	188
<b>Total Budget</b>	<b>0</b>	<b>0</b>	<b>275</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>275</b>	<b>275</b>

#### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
PRIIA	275	275	275
<b>Total</b>	<b>275</b>		

#### Variance Analysis

Project initiated in FY2016

## WMATA FY2017 Capital Project Summary

### CIP0139\_S14 Rail & Operations Data Analysis Procedure

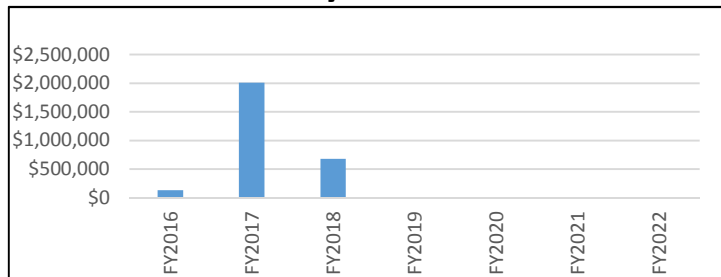
#### Project Description

Proactive safety analysis of information provided by Operating and Maintenance departments is not routinely conducted. This negatively impacts the ability of WMATA to provide more support for proficiency testing, conduct more in- depth safety studies, reviews and accident/incident investigations. This project addresses FTA SMI R-7-42-b

#### Deliverables

- 1) Provide revised draft of Policy/Instruction 10.4/0
  
- 2) Develop a "top ten" list of highest priority accident/incident investigations monthly

#### Financial Summary



#### Milestones

- 1) Deliver training to all ROCC Stakeholders

#### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	0	43	637	216	0	0	0	0	895	895
Non-Personnel	0	92	1,373	464	0	0	0	0	1,930	1,930
<b>Total Budget</b>	<b>0</b>	<b>135</b>	<b>2,010</b>	<b>680</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,825</b>	<b>2,825</b>

#### Planned Funding Sources

As of 12/16/2015	FY2017
PRIIA	2,010
<b>Total</b>	<b>2,010</b>

Original FY11-FY16 Cost	Current FY11 - FY16 Cost
2,825	2,825

#### Variance Analysis

Project initiated in FY2016

## WMATA FY2017 Capital Project Summary

### CIP0139\_S2 Electronic Transfer Records Analysis

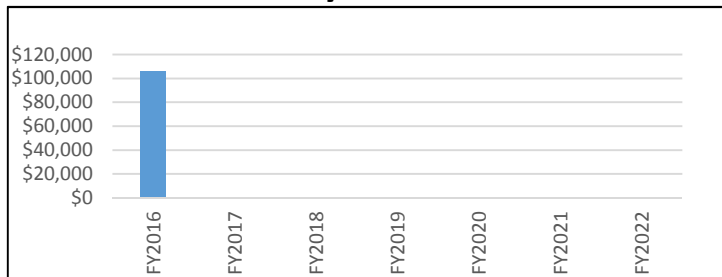
#### Project Description

No formal transfer records are used when Rail Traffic Controllers (RTC) complete shift briefings. Until such time as electronic transfer records are implemented, WMATA must ensure that its RTCs utilize paper-based reporting logs with formal signatures.. This project addresses FTA SMI R-1-9-a.

#### Deliverables

1) Create a new briefing template for reporting requirements. Distribute new policy which outlines guidance to use while conducting shift change reports. A reoccurring inspection of a random sampling of schedules to ensure compliance

#### Financial Summary



#### Milestones

1) Quality Audit Report to be completed to ensure all deliverables are completed as planned

#### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	0	33	0	0	0	0	0	0	33	33
Non-Personnel	0	72	0	0	0	0	0	0	72	72
<b>Total Budget</b>	<b>0</b>	<b>106</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>106</b>	<b>106</b>

#### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
<b>Total</b>	<b>0</b>	<b>106</b>	<b>106</b>

#### Variance Analysis

Project initiated in FY2016



## WMATA FY2017 Capital Project Summary

### CIP0139\_S3 Establish Firm Limits on Minimum Track Time

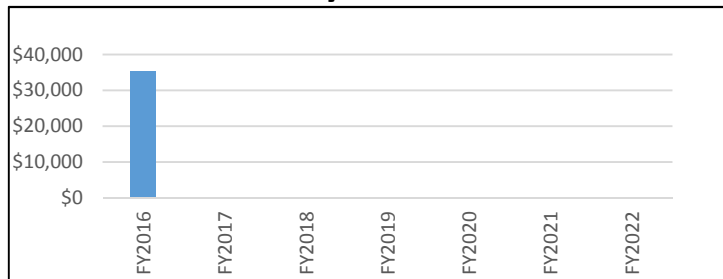
#### Project Description

WMATA must establish firm limits on minimum track time for inspection, testing and maintenance activities per month. Reassessments of limits must be performed annually. This project addresses FTA SMI R-3-24-a.

#### Deliverables

- 1) Create a comprehensive 12-week look ahead RSA schedule
- 2) Create the General Orders Track Right System (GOTRS) Procedure Report to identify changes made in GOTRS

#### Financial Summary



#### Milestones

- 1) Submit to FTA for consideration of closure in FY2016

#### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 - FY2022	
									FY2016 - FY2022	FY2011 - FY2022
Personnel	0	11	0	0	0	0	0	0	11	11
Non-Personnel	0	24	0	0	0	0	0	0	24	24
<b>Total Budget</b>	<b>0</b>	<b>35</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>35</b>	<b>35</b>

#### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
<b>Total</b>	<b>0</b>	<b>35</b>	<b>35</b>

#### Variance Analysis

Project initiated in FY2016

## WMATA FY2017 Capital Project Summary

### CIP0139\_S4 Eliminate Work Order Backlog

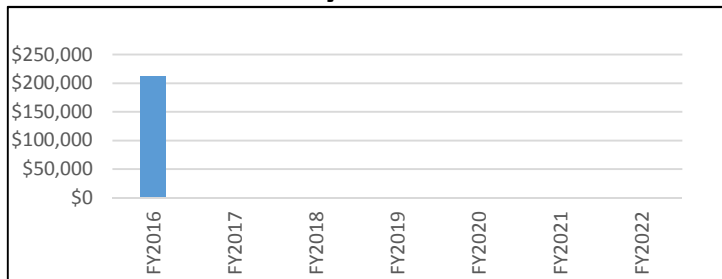
#### Project Description

Due to lack of track time, WMATA's maintenance departments must consistently re-schedule work, resulting in growing maintenance backlogs, dating back to 2012 and 2013. This project addresses FTA SMI R-3-25-a.

#### Deliverables

- 1) Provide narrative for reestablishment of the Defect Report
- 2) Provide a detailed staffing plan and explanation

#### Financial Summary



#### Milestones

- 1) Submit to FTA for consideration of closure in FY2016

#### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 - FY2022	FY2011 - FY2022
Personnel	0	67	0	0	0	0	0	0	67	67
Non-Personnel	0	145	0	0	0	0	0	0	145	145
<b>Total Budget</b>	0	212	0	0	0	0	0	0	212	212

#### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
<b>Total</b>	0	212	212

#### Variance Analysis

Project initiated in FY2016

## WMATA FY2017 Capital Project Summary

### CIP0139\_S5 Update Quality Audit Processes

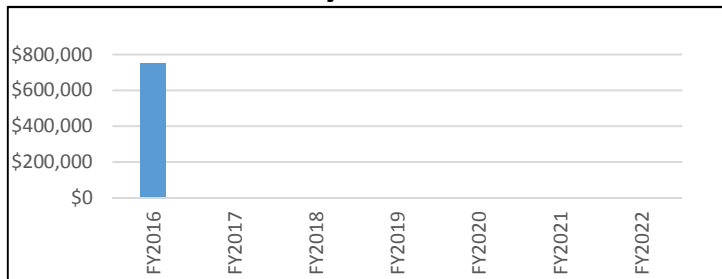
#### Project Description

Documented maintenance procedures and standards operating procedures are not implemented as required. This project addresses FTA SMI R-4-27-a

#### Deliverables

- 1) Develop Safety Critical Procedure Manuals for Fire Life Safety, Traction Power and Low Voltage Power events
- 2) Tunnel Ventilation, Fire Suppression. Develop Audit plan schedule for implementation of new procedures

#### Financial Summary



#### Milestones

- 1) Submit to FTA for consideration of closure in FY2016

#### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 - FY2022	FY2011 - FY2022
Personnel	0	238	0	0	0	0	0	0	238	238
Non-Personnel	0	512	0	0	0	0	0	0	512	512
<b>Total Budget</b>	0	750	0	0	0	0	0	0	750	750

#### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
<b>Total</b>	0	750	750

#### Variance Analysis

Project initiated in FY2016

## WMATA FY2017 Capital Project Summary CIP0139\_S6 Reporting of all Signal Alarms

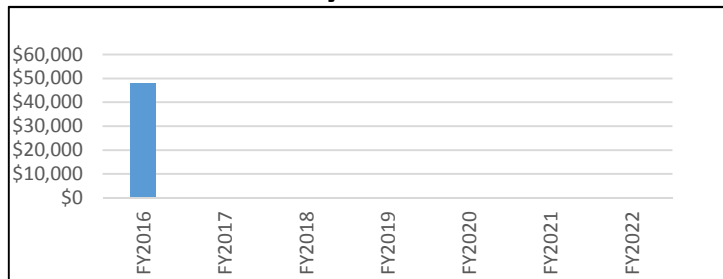
### Project Description

All ATC alarms and issues must be communicated to ATC for investigation, repair and analysis. This project addresses FTA SMI R-4-29-a

### Deliverables

- 1) Perform scope verification and inspection of deliverables to ensure compliance
- 2) QAAW ATC alarm maximum work order review

### Financial Summary



### Milestones

- 1) Submit to FTA for consideration of closure in FY2016

### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 - FY2022	FY2011 - FY2022
Personnel	0	15	0	0	0	0	0	0	15	15
Non-Personnel	0	33	0	0	0	0	0	0	33	33
<b>Total Budget</b>	0	48	0	0	0	0	0	0	48	48

### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
	0	48	48

### Variance Analysis

Project initiated in FY2016

## WMATA FY2017 Capital Project Summary

### CIP0139\_S7 Negative Return Current Mitigation

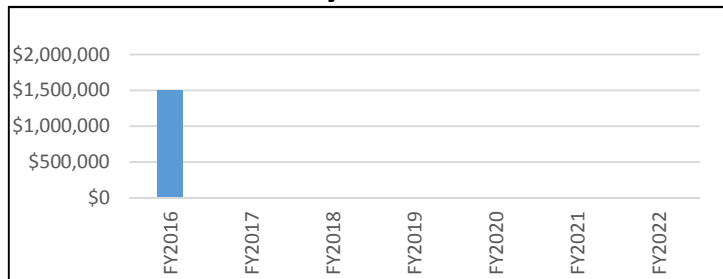
#### Project Description

WMATA must develop a plan to document roles and responsibilities, activities and points of coordination regarding its program to measure, document and mitigate the impacts of stray negative return current. This project addresses FTA SMI R-4-30-a

#### Deliverables

- 1) Develop business process for monitoring and correcting stray current
- 2) Perform scope verification and inspection of deliverables

#### Financial Summary



#### Milestones

- 1) Submit to FTA for consideration of closure in FY2016

#### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 - FY2022	
									FY2016 - FY2022	FY2011 - FY2022
Personnel	0	475	0	0	0	0	0	0	475	475
Non-Personnel	0	1,025	0	0	0	0	0	0	1,025	1,025
<b>Total Budget</b>	<b>0</b>	<b>1,500</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,500</b>	<b>1,500</b>

#### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
<b>Total</b>	<b>0</b>	<b>1,500</b>	<b>1,500</b>

#### Variance Analysis

Project initiated in FY2016

## WMATA FY2017 Capital Project Summary

### CIP0139\_S8 Automation of Inspection and Maintenance Records

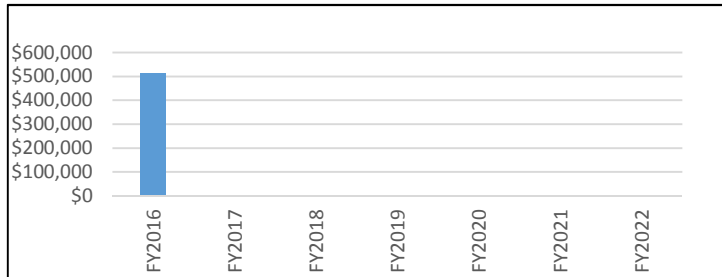
#### Project Description

Documentation and scheduling of tunnel ventilation system inspections must be improved to ensure compliance with required procedures. This project addresses FTA SMI R-6-36-b

#### Deliverables

- 1) Audit of PLANT 1000 instructions for testing and inspection procedures
- 2) Critical fire and life safety testing and inspection procedures for tunnel ventilation

#### Financial Summary



#### Milestones

- 1) Submit to FTA for consideration of closure in FY2016

#### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 - FY2022	FY2011 - FY2022
Personnel	0	163	0	0	0	0	0	0	163	163
Non-Personnel	0	352	0	0	0	0	0	0	352	352
<b>Total Budget</b>	0	515	0	0	0	0	0	0	515	515

#### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
<b>Total</b>	0	515	515

#### Variance Analysis

Project initiated in FY2016

## WMATA FY2017 Capital Project Summary

### CIP0139\_S9 Replacement of pneumatic control boxes

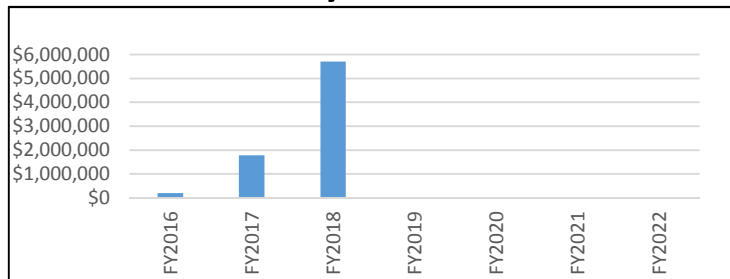
#### Project Description

WMATA must complete replacement of the pneumatic control boxes for ventilation fans with Programmable Logic Control systems within the next five years. This project addresses FTA SMI R-6-37-a

#### Deliverables

1) Receipt of first set of PLC control panels

#### Financial Summary



#### Milestones

1) Submit to FTA for consideration of closure in FY2018

#### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	0	65	563	1,809	0	0	0	0	2,437	2,437
Non-Personnel	0	139	1,214	3,898	0	0	0	0	5,251	5,251
<b>Total Budget</b>	<b>0</b>	<b>204</b>	<b>1,777</b>	<b>5,707</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>7,688</b>	<b>7,688</b>

#### Planned Funding Sources

As of 12/16/2015	FY2017
PRIIA	1,777
<b>Total</b>	<b>1,777</b>

Original FY11-FY16 Cost	Current FY11 - FY16 Cost
7,688	7,688

#### Variance Analysis

Project initiated in FY2016

## WMATA FY2017 Capital Project Summary

### CIP0140 Rail Mileage Based Asset Management

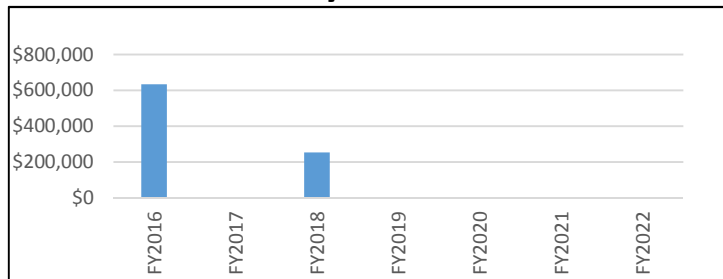
#### Project Description

This project is intended to improve rail car fleet reliability through implementation of rail car configuration management, rail car mileage capture, mobile storeroom inventory management and mileage-based preventive maintenance.

#### Deliverables

1) No planned activities for FY2017

#### Financial Summary



#### Milestones

1) Warranty fulfillment in FY2018

#### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	709	156	0	174	0	0	0	0	330	1,040
Non-Personnel	9,871	477	0	79	0	0	0	0	556	10,427
<b>Total Budget</b>	<b>10,580</b>	<b>633</b>	<b>0</b>	<b>254</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>887</b>	<b>11,467</b>

#### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
	0	22,909	11,213

#### Variance Analysis

This project had a reduction in scope which comprised of a limited pilot program



## WMATA FY2017 Capital Project Summary

### CIP0142 Rail Lifecycle Overhaul

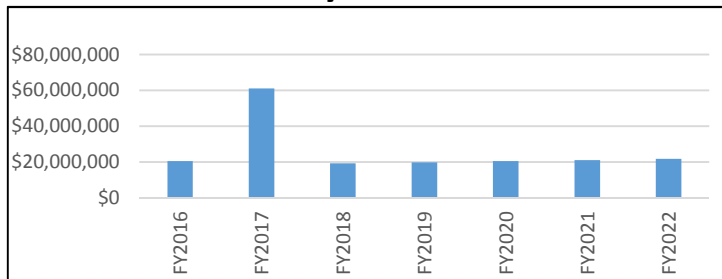
#### Project Description

This project will provide preventive maintenance to keep the WMATA Rail fleet in a state of good repair. Funding from this project provides the labor required to provide upgrades, repairs, and maintenance to capital assets that have a useful life of over one year. Preventive Maintenance is funded partially by this project and partially by the Operating budget. WMATA proposes to temporarily changing the split in Fiscal Year 2016-2017 and resume the traditional split thereafter.

#### Deliverables

1) Routine scheduled maintenance and minor repairs to railcar fleet.

#### Financial Summary



#### Milestones

1) Ongoing overhaul project with newly assigned tasks and milestones as needed

#### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	20,262	20,550	61,000	19,306	19,886	20,482	21,097	21,729	184,050	204,312
Non-Personnel	81,010	0	0	0	0	0	0	0	0	81,010
<b>Total Budget</b>	<b>101,272</b>	<b>20,550</b>	<b>61,000</b>	<b>19,306</b>	<b>19,886</b>	<b>20,482</b>	<b>21,097</b>	<b>21,729</b>	<b>184,050</b>	<b>285,322</b>

#### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
State of Good Repair	61,000	124,258	121,822
<b>Total</b>	<b>61,000</b>		

#### Variance Analysis

No significant change

## WMATA FY2017 Capital Project Summary

### CIP0143 Bus Lifecycle Overhaul

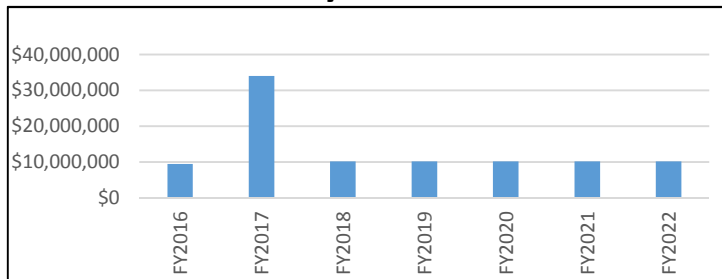
#### Project Description

This project provides for funding related to preventive maintenance activities required to maintain the WMATA Bus Fleet in a state of good repair. Preventive maintenance programs include: accessibility equipment, destination signs, coolant systems, service lane activities, fluid analysis, power trains, filter maintenance, safety related items, bus batteries, and wheel and tire maintenance.

#### Deliverables

1) FY2017 - Preventive Maintenance Capital budget will be increased to \$34 Million

#### Financial Summary



#### Milestones

1) FY2017 - Preventive Maintenance budget will be increased to \$34m

#### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	11,384	9,492	34,000	10,200	10,200	10,200	10,200	10,200	94,492	105,876
Non-Personnel	41,576	0	0	0	0	0	0	0	0	41,576
<b>Total Budget</b>	<b>52,959</b>	<b>9,492</b>	<b>34,000</b>	<b>10,200</b>	<b>10,200</b>	<b>10,200</b>	<b>10,200</b>	<b>10,200</b>	<b>94,492</b>	<b>147,452</b>

#### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
Federal Formula	34,000	63,708	62,452
<b>Total</b>	<b>34,000</b>		

#### Variance Analysis

No significant change

## WMATA FY2017 Capital Project Summary

### CIP0145 Rail Yard Hardening and CCTV Enhancement

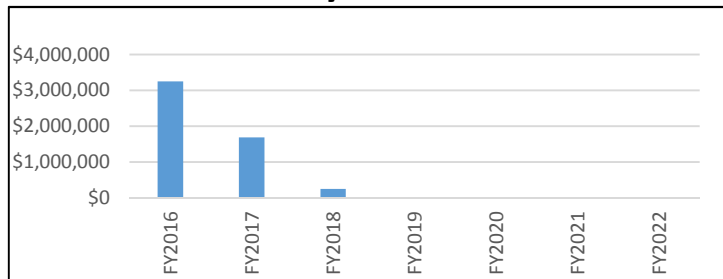
#### Project Description

This project will provide for the hardening of various rail yards and enhance CCTV security at stations. A portion of the funding for this project is provided by dedicated Federal security grants.

#### Deliverables

1) Complete CCTV enhancements at 5 stations

#### Financial Summary



#### Milestones

1) Construction to be completed in Q3 FY2017  
2) Close-out of contract in FY2018

#### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	19,538	1,215	857	125	0	0	0	0	2,196	21,735
Non-Personnel	24,550	2,033	831	121	0	0	0	0	2,985	27,536
<b>Total Budget</b>	<b>44,089</b>	<b>3,247</b>	<b>1,688</b>	<b>246</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5,181</b>	<b>49,270</b>

#### Planned Funding Sources

As of 12/16/2015	FY2017
Federal Formula	637
DHS	1,051
<b>Total</b>	<b>1,688</b>

Original FY11-FY16 Cost	Current FY11 - FY16 Cost
0	46,851

#### Variance Analysis

Project was initiated in FY2014

## WMATA FY2017 Capital Project Summary CIP0148 Repair of Damaged Railcars

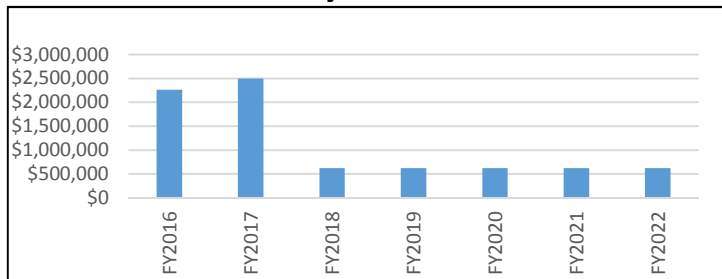
### Project Description

This project performs the repair of 6 damaged 5000 and 6000 series railcars involved in collisions and accidents. Non-repairable railcars are to be scrapped upon final determination.

### Deliverables

1) Complete repair of the damaged 5000 and 6000 series railcars.

### Financial Summary



### Milestones

- 1) Complete repairs on Railcar number 6050
- 2) Award repair contract and complete repair work on railcar number 5052 and 5053

### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	320	857	369	92	92	92	92	92	1,686	2,006
Non-Personnel	1,197	1,404	2,131	530	530	530	530	530	6,186	7,384
<b>Total Budget</b>	<b>1,517</b>	<b>2,261</b>	<b>2,500</b>	<b>622</b>	<b>622</b>	<b>622</b>	<b>622</b>	<b>622</b>	<b>7,872</b>	<b>9,390</b>

### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
Insurance	2,500	0	3,778
<b>Total</b>	<b>2,500</b>		

### Variance Analysis

Project was initiated in FY2014

## WMATA FY2017 Capital Project Summary

### CIP0150 Fire Systems

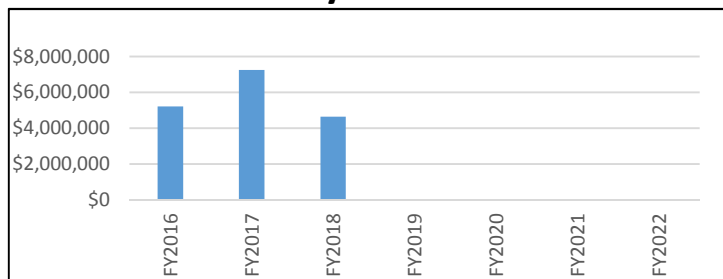
#### Project Description

This project upgrades existing fire alarm systems in auxiliary facilities and provides a central monitoring system. This project includes, but is not limited to, the removal and replacement of Halon Suppression System, development of a Fire and Intrusion Alarm (FIA) training lab and the repair or replacement of the existing standpipe system including parking garages.

#### Deliverables

- 1) Overhaul fire systems at 5 locations: Carmen Turner, Greenbelt, Branch Ave., Shady Grove and Glenmont
- 2) Complete standpipe replacement on routes F, G, and L

#### Financial Summary



#### Milestones

- 1) Complete existing contract in FY2018

#### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	4,353	2,784	4,225	2,597	0	0	0	0	9,607	13,960
Non-Personnel	15,991	2,434	3,018	2,046	0	0	0	0	7,498	23,490
<b>Total Budget</b>	<b>20,344</b>	<b>5,218</b>	<b>7,243</b>	<b>4,644</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>17,105</b>	<b>37,449</b>

#### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
State of Good Repair	7,243	0	25,721
<b>Total</b>	<b>7,243</b>		

#### Variance Analysis

Project was initiated in FY2014

## WMATA FY2017 Capital Project Summary CIP0151 Station Cooling Program

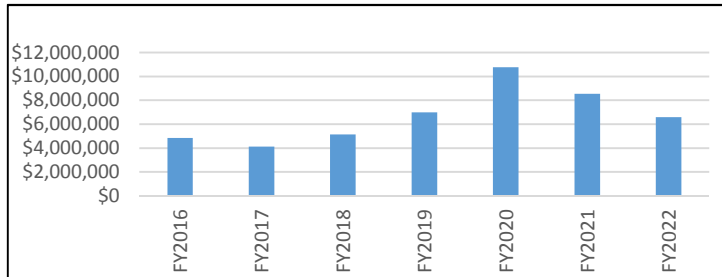
### Project Description

This project funds the rehabilitation of station air conditioning systems including, but not limited to, rehabilitation/replacement of chiller plants, cooling towers, ventilation systems, air handling units and ductwork. Station cooling systems are overhauled at 7 to 14 years and replaced at 20 years.

### Deliverables

1) Design and construction of Farragut North condenser water piping and E route under-platform duct

### Financial Summary



### Milestones

- 1) Complete procurement of line and replacement of Farragut North condenser piping and duct FY2017
- 2) Complete designs and replace/overhaul components (Q2 FY2017)
- 3) Complete designs for stations air conditioning units (Q2 FY2019)

### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 - FY2022	
									FY2016 - FY2022	FY2011 - FY2022
Personnel	4,057	1,293	3,319	1,397	1,877	2,829	2,254	1,401	14,369	18,427
Non-Personnel	27,050	3,558	804	3,743	5,117	7,953	6,299	5,184	32,658	59,708
<b>Total Budget</b>	<b>31,107</b>	<b>4,850</b>	<b>4,123</b>	<b>5,140</b>	<b>6,994</b>	<b>10,782</b>	<b>8,553</b>	<b>6,585</b>	<b>47,027</b>	<b>78,134</b>

### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
State of Good Repair	4,123	0	36,057
<b>Total</b>	<b>4,123</b>		

### Variance Analysis

Project was initiated in FY2014

# WMATA FY2017 Capital Project Summary

## CIP0152 Parking Garage Rehabilitation

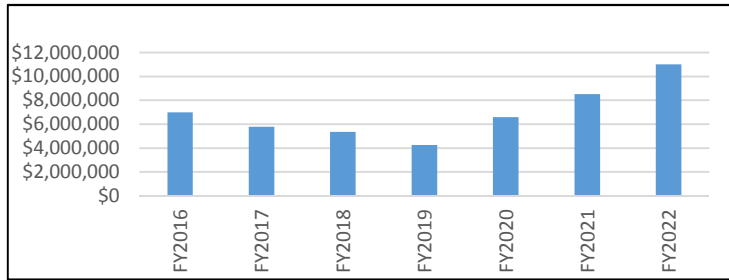
### Project Description

This project will rehabilitate parking structures including repair of horizontal concrete surfaces, slabs, soffits, beams, columns, walls; repair or replacement of post-tensioning anchorages, tendons, sheathing and expansion joints; application of traffic markings and traffic bearing membrane. Rehabilitation includes: structural repairs to defective concrete sections of the structure, repairs to defective "T Beam" joints, repair/replacement of defective electric/mechanical components that are critical to safe operation of the garage and repair/replacement of protective surface coating.

### Deliverables

- 1) Rehab three Parking Garages - complete Vienna South Parking Garage October 2016
- 2) Huntington South Parking Garage assessment April 2016
- 3) Start Rehab of Shady Grove North Parking Garage and Franconia-Springfield East Parking Garage

### Financial Summary



### Milestones

- 1) Vienna South Parking Garage 720 Calendar Days (CD) October 2016
- 2) Shady Grove North Parking Garage NTP [Nov 18, 2015] + 930 CDs June 2018
- 3) Franconia-Springfield East Parking Garage NTP [Nov 18, 2015] + 630 calendar days, August 2017

### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	2,547	1,611	1,564	1,579	1,287	1,291	1,619	2,191	11,141	13,689
Non-Personnel	9,128	5,376	4,233	3,782	2,968	5,289	6,890	8,824	37,362	46,489
<b>Total Budget</b>	<b>11,675</b>	<b>6,986</b>	<b>5,797</b>	<b>5,361</b>	<b>4,254</b>	<b>6,580</b>	<b>8,510</b>	<b>11,015</b>	<b>48,503</b>	<b>60,178</b>

### Planned Funding Sources

As of 12/16/2015	FY2017
Debt	5,797
<b>Total</b>	<b>5,797</b>

Original FY11-FY16 Cost	Current FY11 - FY16 Cost
0	18,551

### Variance Analysis

Project was initiated in FY2014

## WMATA FY2017 Capital Project Summary CIP0153 Accessible Station Signage

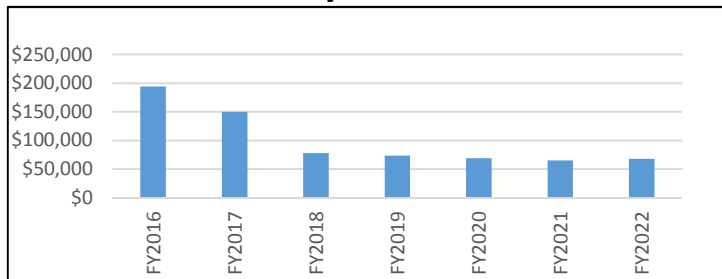
### Project Description

This project will fund accessibility and wayfinding signage, such as elevator headhouses with station names and connecting rail lines at various Metrorail stations. Additionally, this project will support development of a web-based database that includes an individual record for all 19,000+ bus stops in the Metropolitan Washington region via virtual wayfinding. This application will be enhanced to make it available via mobile devices.

### Deliverables

- 1) Award Contract to develop a web based wayfinding application available via mobile device - June 2016
- 2) Complete Paul S. Sarbanes Silver Spring Transit Center Signage Improvements - September 2016

### Financial Summary



### Milestones

- 1) FY2017 - Signage Improvements at Paul S. Sarbanes Silver Spring Transit Center complete

### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	97	9	0	0	0	0	0	0	9	106
Non-Personnel	89	185	150	78	74	69	65	68	689	778
<b>Total Budget</b>	<b>186</b>	<b>194</b>	<b>150</b>	<b>78</b>	<b>74</b>	<b>69</b>	<b>65</b>	<b>68</b>	<b>698</b>	<b>884</b>

### Planned Funding Sources

As of 12/16/2015	FY2017
Local	150
<b>Total</b>	<b>150</b>

Original FY11-FY16 Cost	Current FY11 - FY16 Cost
0	380

### Variance Analysis

Project initiated in FY2014



## WMATA FY2017 Capital Project Summary CIP0170 Roof Rehabilitation and Replacement

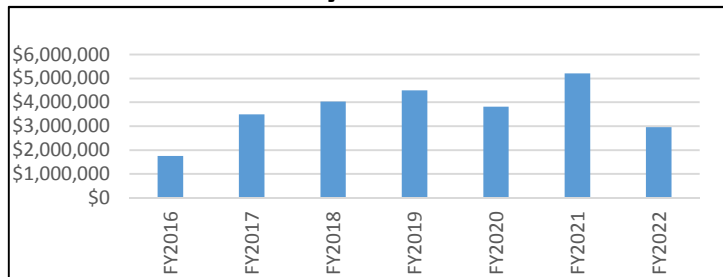
### Project Description

This project will replace and perform major rehabilitation of roofs on all types of Metro facilities.

### Deliverables

1) Construction work on Montgomery Bus Garage to begin

### Financial Summary



### Milestones

1) Begin construction on Montgomery Bus Garage, deferred from FY2016

### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 - FY2022	
									FY2016 - FY2022	FY2011 - FY2022
Personnel	522	472	588	677	757	641	875	497	4,507	5,029
Non-Personnel	2,164	1,275	2,912	3,351	3,748	3,175	4,333	2,461	21,254	23,418
<b>Total Budget</b>	<b>2,686</b>	<b>1,747</b>	<b>3,500</b>	<b>4,028</b>	<b>4,505</b>	<b>3,816</b>	<b>5,209</b>	<b>2,958</b>	<b>25,762</b>	<b>28,447</b>

### Planned Funding Sources

As of 12/16/2015	FY2017
State of Good Repair	3,500
<b>Total</b>	<b>3,500</b>

Original FY11-FY16 Cost	Current FY11 - FY16 Cost
0	4,433

### Variance Analysis

Project was initiated in FY2014

## WMATA FY2017 Capital Project Summary CIP0185 Escalator Replacement

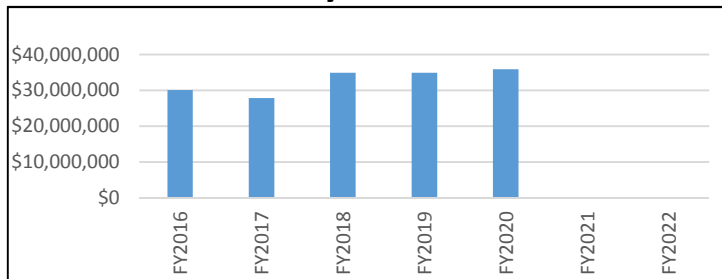
### Project Description

This project will replace the oldest and poorest performing escalators in the system as needed to maintain escalator safety, availability and reliability. The new escalators will be equipped with more energy efficient devices and capabilities. This program will result in the replacement of approximately 128 escalators at 34 stations. Fourteen of the originally planned replacements under this project will now be done as major rehabilitations.

### Deliverables

1) Replace approximately 22 escalators, projected locations are: Bethesda, Woodley Park, Van Ness, Georgia Avenue, Columbia, Waterfront, Arlington Cemetery, Capitol Heights, Smithsonian, Glenmont, Shaw, Minnesota Avenue

### Financial Summary



### Milestones

1) Complete current contract to repair 128 escalators (20 annually) by FY2020

### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	10,425	8,932	9,351	10,477	10,775	11,011	0	0	50,547	60,972
Non-Personnel	35,666	21,120	18,488	24,469	24,139	24,863	0	0	113,079	148,745
<b>Total Budget</b>	<b>46,091</b>	<b>30,052</b>	<b>27,840</b>	<b>34,946</b>	<b>34,914</b>	<b>35,874</b>	<b>0</b>	<b>0</b>	<b>163,626</b>	<b>209,717</b>

### Planned Funding Sources

As of 12/16/2015	FY2017
PRIIA	27,840
<b>Total</b>	<b>27,840</b>

Original FY11-FY16 Cost	Current FY11 - FY16 Cost
0	76,748

### Variance Analysis

The estimated cost to replace escalators has increased due to new safety requirements for all deep stations

## WMATA FY2017 Capital Project Summary CIP0196 Safety Measurement System

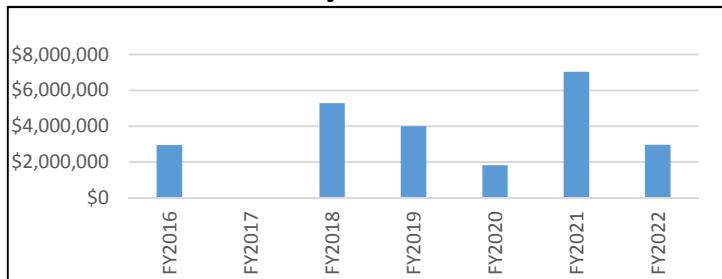
### Project Description

This project will develop an automated and centralized safety management system that will capture information from accidents and incidents that occur at Metro stations, Metro facilities and all Metro vehicles including: MetroAccess, Metrobus and Metrorail vehicles. This system will give Metro a single repository of safety data and will be capable of generating reports.

### Deliverables

1) Phase 1 complete. No deliverables for FY2017. Program Phase 2 to resume FY2018

### Financial Summary



### Milestones

1) Phase 1 complete. No Milestones for FY2017. Program Phase 2 to resume FY2018

### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 - FY2022	
									FY2016 - FY2022	FY2011 - FY2022
Personnel	48	140	0	0	0	0	0	0	140	188
Non-Personnel	8,581	2,805	0	5,289	4,001	1,811	7,031	2,966	23,903	32,484
<b>Total Budget</b>	<b>8,629</b>	<b>2,946</b>	<b>0</b>	<b>5,289</b>	<b>4,001</b>	<b>1,811</b>	<b>7,031</b>	<b>2,966</b>	<b>24,044</b>	<b>32,672</b>

### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
		0	11,574
<b>Total</b>	<b>0</b>	<b>0</b>	<b>11,574</b>

### Variance Analysis

Project was initiated in FY2014

## WMATA FY2017 Capital Project Summary

### CIP0197 Rehabilitation of Non-Revenue Facilities

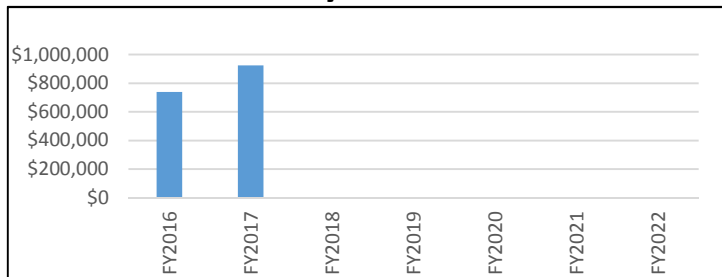
#### Project Description

This project provides infrastructure improvements and rehabilitation of non-revenue facilities. Elements of this project include the replacement or overhaul of HVAC, mechanical, electrical, data/communications, structural components and systems. Facilities include MTPD facilities, Carmen Turner Facilities and other non-revenue facilities.

#### Deliverables

1) Purchase new equipment to include but not limited to enhanced sprinkler system, upgraded electrical wiring, rehabilitate flooring and bathroom components, replace old carpet, rehabilitate drain pits, replace HVAC units, minor structural renovations at Carmen Turner Facility. Migrate HVAC systems into Authority-wide control system to include the purchase of electric heaters, fan coil units, gas heaters, heating ventilation units and package air conditioning units at Carmen Turner and Pennsy Drive

#### Financial Summary



#### Milestones

1) Complete rehabilitation and close-out contract FY2017

#### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	4	35	0	0	0	0	0	0	35	39
Non-Personnel	1,565	703	924	0	0	0	0	0	1,627	3,192
<b>Total Budget</b>	<b>1,569</b>	<b>738</b>	<b>924</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,662</b>	<b>3,231</b>

#### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
Federal Formula	924	0	2,406
<b>Total</b>	<b>924</b>		

#### Variance Analysis

Project was initiated in FY2014

## WMATA FY2017 Capital Project Summary

### CIP0204 7000 Series Rail Car HVAC Maintenance Facility

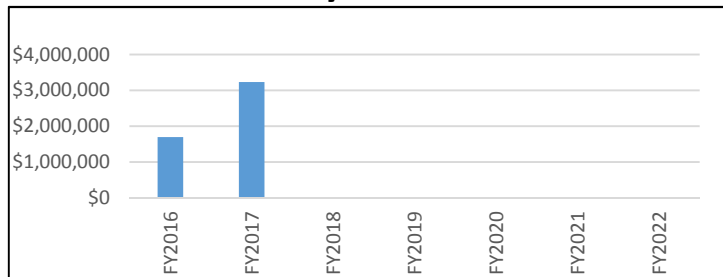
#### Project Description

This project will construct elevated platforms at rail yard facilities to allow for the maintenance of the new 7000 series Rail car HVAC maintenance system. The HVAC system of the new 7000 series Rail cars is located on top of the cars and WMATA currently does not have the capability to maintain the new HVAC units in a safe and efficient manner.

#### Deliverables

- 1) Completion of 7000 Series rooftop access at New Carrollton Yard
- 2) Exercise Option 1 - 7000 Series rooftop access at West Falls Church

#### Financial Summary



#### Milestones

- 1) Close-out of New Carrollton Yard construction
- 2) Exercise Option 1 on contract - begin construction work at West Falls Church

#### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	44	455	772	0	0	0	0	0	1,226	1,271
Non-Personnel	549	1,245	2,458	0	0	0	0	0	3,704	4,253
<b>Total Budget</b>	<b>594</b>	<b>1,700</b>	<b>3,230</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4,930</b>	<b>5,524</b>

#### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
PRIIA	3,230	0	2,294
<b>Total</b>	<b>3,230</b>		

#### Variance Analysis

Project was initiated in FY2014

## WMATA FY2017 Capital Project Summary

### CIP0205 Bush Hill Aerial Structure Rehabilitation

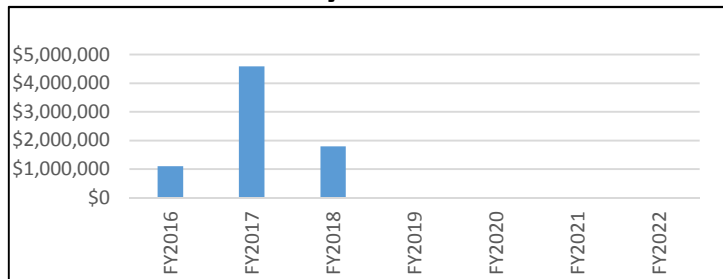
#### Project Description

This project will rehabilitate the Bush Hill bridge in order to maintain structural integrity. This bridge was originally constructed in the late 1990's and has been identified for rehabilitation through an annual inspection. The Bush Hill Bridge is located on the Blue line (the J-route) and is used by Metrorail daily.

#### Deliverables

- 1) Completion of Bush Hill Aerial Structure rehabilitation June 2017
- 2) Real Estate and Right of Way acquisition, possible coordination agreement FY2017

#### Financial Summary



#### Milestones

- 1) Completion of the Bush Hill Aerial Structure rehabilitation

#### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	32	380	2,741	836	0	0	0	0	3,957	3,990
Non-Personnel	26	720	1,844	966	0	0	0	0	3,529	3,556
<b>Total Budget</b>	<b>59</b>	<b>1,100</b>	<b>4,585</b>	<b>1,802</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>7,487</b>	<b>7,545</b>

#### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
State of Good Repair	4,585	0	1,159
<b>Total</b>	<b>4,585</b>		

#### Variance Analysis

Project was initiated in FY2015

## WMATA FY2017 Capital Project Summary

### CIP0210 Pollution Prevention for Track Fueling Areas

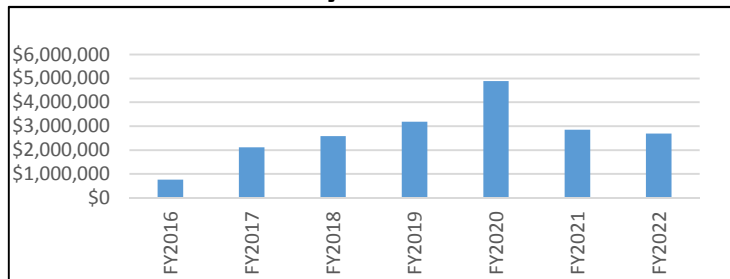
#### Project Description

This project designs and implements modifications to track fueling areas including, but not limited to, systems to capture, contain and pretreat diesel fuel spills prior to discharge to storm sewer system.

#### Deliverables

- 1) Final design completed in Q1 FY2017
- 2) Contract awarded by Q4 FY2017

#### Financial Summary



#### Milestones

- 1) Final design completed in Q1 FY2017
- 2) Contract awarded by Q4 FY2017.

#### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 - FY2022	
									FY2016 - FY2022	FY2011 - FY2022
Personnel	32	223	294	399	427	527	401	363	2,633	2,665
Non-Personnel	319	541	1,818	2,181	2,757	4,361	2,458	2,331	16,447	16,767
<b>Total Budget</b>	<b>351</b>	<b>764</b>	<b>2,112</b>	<b>2,580</b>	<b>3,183</b>	<b>4,888</b>	<b>2,859</b>	<b>2,694</b>	<b>19,080</b>	<b>19,432</b>

#### Planned Funding Sources

As of 12/16/2015	FY2017
PRIIA	2,112
<b>Total</b>	<b>2,112</b>

Original FY11-FY16 Cost	Current FY11 - FY16 Cost
0	1,116

#### Variance Analysis

Project was initiated in FY2014

## WMATA FY2017 Capital Project Summary CIP0211 Storm Water Facility Assessment

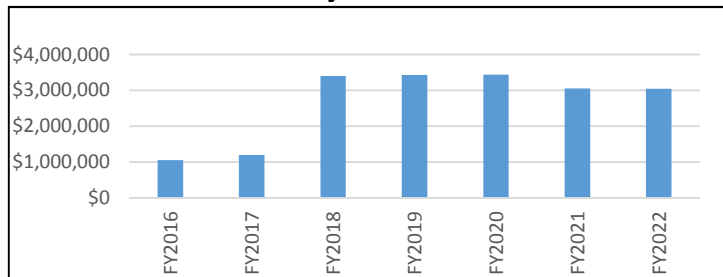
### Project Description

This project identifies, evaluates, designs and implements modifications to WMATA's existing stormwater management infrastructure and facilities to provide best management practices which comply with federal, state, and local stormwater management requirements.

### Deliverables

- 1) First design task to be started in FY2017
- 2) Report, cost estimate and implementation schedule to be completed FY2017

### Financial Summary



### Milestones

- 1) First design task to be started in FY2017
- 2) Report, cost estimate and implementation schedule to be completed FY2017

### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 - FY2011 - FY2022	
									FY2016 - FY2022	FY2011 - FY2022
Personnel	-24	205	129	372	401	402	417	434	2,360	2,336
Non-Personnel	484	843	1,071	3,032	3,026	3,038	2,635	2,612	16,257	16,741
<b>Total Budget</b>	<b>460</b>	<b>1,049</b>	<b>1,200</b>	<b>3,404</b>	<b>3,427</b>	<b>3,440</b>	<b>3,052</b>	<b>3,046</b>	<b>18,618</b>	<b>19,078</b>

### Planned Funding Sources

As of 12/16/2015	FY2017
Federal Formula	1,200
<b>Total</b>	<b>1,200</b>

Original FY11-FY16 Cost	Current FY11 - FY16 Cost
0	1,471

### Variance Analysis

Project was initiated in FY2014



## WMATA FY2017 Capital Project Summary

### CIP0212 Sustainability Investments - Pilot Program

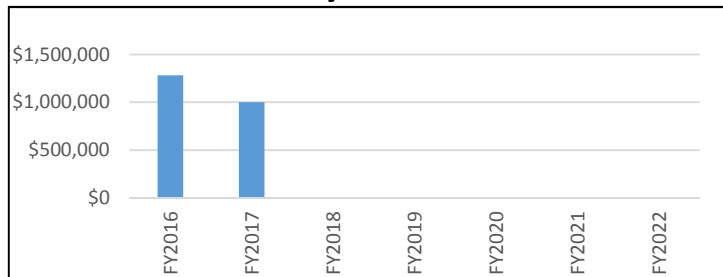
#### Project Description

This project will identify and pilot new technologies and practices to reduce operating costs, consumption of natural resources, and pollution while continuing to improve service.

#### Deliverables

- 1) Develop and Evaluate Rail Regenerative Braking station
- 2) Evaluate Energy Management System - mapping locations, energy usage and opportunities for savings
- 3) Testing on Solar Water Heaters at selected facilities
- 4) Installation of three Electric Vehicle Charging kiosks at selected stations

#### Financial Summary



#### Milestones

- 1) FY2017 JGB Lighting Retrofit project completed

#### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	5	61	0	0	0	0	0	0	61	66
Non-Personnel	754	1,222	1,000	0	0	0	0	0	2,222	2,976
<b>Total Budget</b>	<b>759</b>	<b>1,283</b>	<b>1,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,283</b>	<b>3,042</b>

#### Planned Funding Sources

As of 12/16/2015	FY2017
Federal Formula	1,000
<b>Total</b>	<b>1,000</b>

Original FY11-FY16 Cost	Current FY11 - FY16 Cost
0	2,042

#### Variance Analysis

Project initiation in FY2014

## WMATA FY2017 Capital Project Summary CIP0215 Rail Scheduling System Upgrade

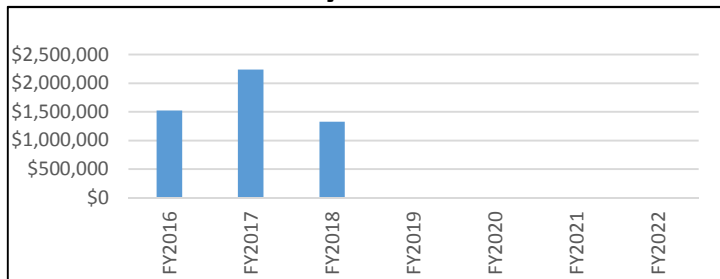
### Project Description

This project focuses on business process improvements in daily operations, planning and scheduling of Metrorail service delivery. The expanding Metrorail system and complex track-maintenance work requires a comprehensive transit scheduling application. Optimized and effective usage of the limited resources will be core to solving challenges such as the maintenance of aging infrastructure and the commitment of providing reliable and safe service to our customers. This project will be completed in two phases. The first phase will install the resource scheduling component and the second phase will install the daily operation management component.

### Deliverables

1) Continue Phase 2: Development and the installation of the daily operation system

### Financial Summary



### Milestones

1) This project will be completed in two phases. The first phase will install the resource scheduling component, with the second phase will implementing the daily operation management component

### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	37	269	569	400	0	0	0	0	1,238	1,276
Non-Personnel	1,007	1,254	1,670	929	0	0	0	0	3,853	4,860
<b>Total Budget</b>	<b>1,044</b>	<b>1,523</b>	<b>2,239</b>	<b>1,329</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5,091</b>	<b>6,135</b>

### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
State of Good Repair	2,239	0	2,567
<b>Total</b>	<b>2,239</b>		

### Variance Analysis

Project was initiated in FY2014

## WMATA FY2017 Capital Project Summary

### CIP0216 Farragut North Beam Rehabilitation

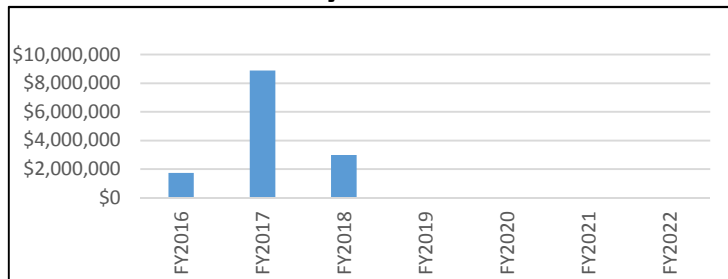
#### Project Description

This project reinforces a second structural beam at the Farragut North station. The Farragut North station was constructed as part of the first Metrorail line in 1976.

#### Deliverables

- 1) Implementation of project control support services June 2016
- 2) Installation of structural retrofit of B9 Beam at Farragut North Station (Q4 FY2017)

#### Financial Summary



#### Milestones

- 1) Completion of Project Control Support Services
- 2) Complete installation of B9 Beam retrofit at Farragut North

#### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	106	622	4,854	1,640	0	0	0	0	7,115	7,221
Non-Personnel	230	1,128	4,042	1,343	0	0	0	0	6,513	6,743
<b>Total Budget</b>	<b>336</b>	<b>1,750</b>	<b>8,896</b>	<b>2,983</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>13,629</b>	<b>13,964</b>

#### Planned Funding Sources

As of 12/16/2015	FY2017
PRIIA	8,896
<b>Total</b>	<b>8,896</b>

Original FY11-FY16 Cost	Current FY11 - FY16 Cost
0	2,086

#### Variance Analysis

Project was initiated in FY2014

## WMATA FY2017 Capital Project Summary CIP0219 Station Lighting Improvements

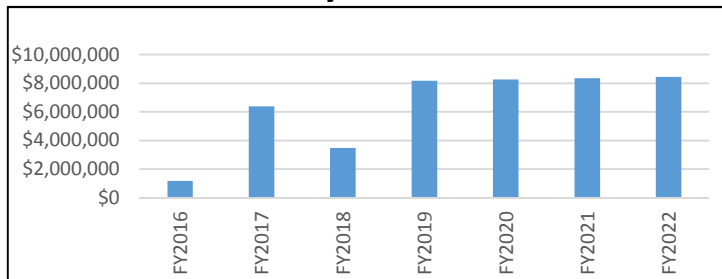
### Project Description

This project improves the lighting and illumination levels at Mezzanines lower level platforms and track beds at select Metrorail stations.

### Deliverables

- 1) Complete Phase 5 Mezzanine and complete the design of the atypical Mezzanine
- 2) Complete design of Trackbed (TKB) and Parapet (PPT) lighting
- 3) Complete 100% Mezzanine construction, commence new contract preparation

### Financial Summary



### Milestones

- 1) Completion of existing contract and Mezzanines
- 2) Begin development of design and work plan for 46 Stations in future year contract

### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	1,299	160	2,033	1,718	3,629	3,714	3,801	3,891	18,945	20,244
Non-Personnel	6,506	1,012	4,343	1,754	4,550	4,550	4,550	4,550	25,311	31,817
<b>Total Budget</b>	<b>7,805</b>	<b>1,172</b>	<b>6,376</b>	<b>3,472</b>	<b>8,179</b>	<b>8,264</b>	<b>8,352</b>	<b>8,442</b>	<b>44,256</b>	<b>52,061</b>

### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
State of Good Repair	6,376	0	8,977
<b>Total</b>	<b>6,376</b>		

### Variance Analysis

Project was initiated in FY2014

## WMATA FY2017 Capital Project Summary

### CIP0220 Bus Planning

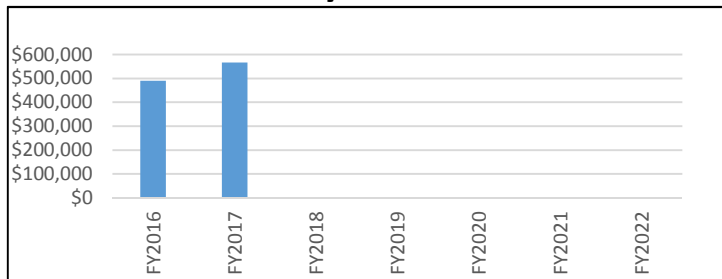
#### Project Description

This program advances a broad range of Metrobus planning projects necessary to sustain the network of services and facilities. Efforts focus on service plans, customer information, facilities mgmt., bus stop accessibility, transit operations, traffic management and fare collection. The projects foster continuous regional customer engagement, service evaluation and market assessment with area Departments of Transportation and other transit providers, resulting in interagency policy strategies for deployment of State of Good Operations investments.

#### Deliverables

- 1) Corridor Study to begin July 2016
- 2) Service Evaluation Studies to begin July 2016

#### Financial Summary



#### Milestones

- 1) FY2017 completion of 1st cycle of the Emerging Corridor work plan
- 2) Completion of initial Service Evaluation Study - FY2017

#### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	0	23	0	0	0	0	0	0	23	23
Non-Personnel	108	467	567	0	0	0	0	0	1,034	1,141
<b>Total Budget</b>	<b>108</b>	<b>490</b>	<b>567</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,057</b>	<b>1,165</b>

#### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
Local	567	0	598
<b>Total</b>	<b>567</b>		

#### Variance Analysis

Project initiated in FY2015

## WMATA FY2017 Capital Project Summary

### CIP0221 Bus Customer Facility Improvements

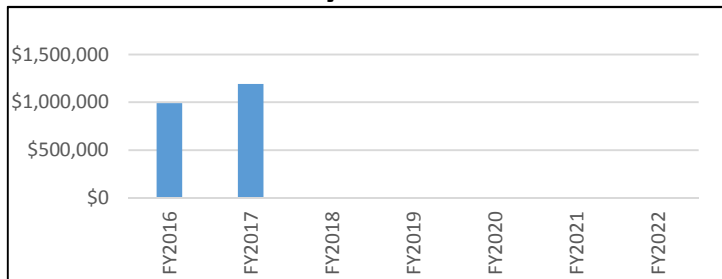
#### Project Description

Project to sustain, replace or renovate Metrobus customer information, facilities and amenities to achieve a State of Good Repair and implement enhancements to reflect safety requirements and industry best practices. Projects will also enhance safe customer experience at bus stops.

#### Deliverables

- 1) Bus Stop Signage Installation completed - June 2017
- 2) Bus Time Table Maps Installation completed - June 2017
- 3) Chevy Chase Bus loop Improvements design estimated completion - December 2016
- 4) Replacement of 10 Bus shelters completed - June 2017

#### Financial Summary



#### Milestones

- 1) Real-time Passenger Information and Wayfinding upgrades estimated completion - July 2016

#### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 - FY2022	
									FY2016 - FY2022	FY2011 - FY2022
Personnel	13	71	48	0	0	0	0	0	119	132
Non-Personnel	1,311	920	1,144	0	0	0	0	0	2,064	3,375
<b>Total Budget</b>	<b>1,324</b>	<b>991</b>	<b>1,192</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,183</b>	<b>3,507</b>

#### Planned Funding Sources

As of 12/16/2015	FY2017
Federal Formula	1,192
<b>Total</b>	<b>1,192</b>

Original FY11-FY16 Cost	Current FY11 - FY16 Cost
0	2,315

#### Variance Analysis

Project initiated in FY2015

## WMATA FY2017 Capital Project Summary

### CIP0230 Wireless Communication Infrastructure

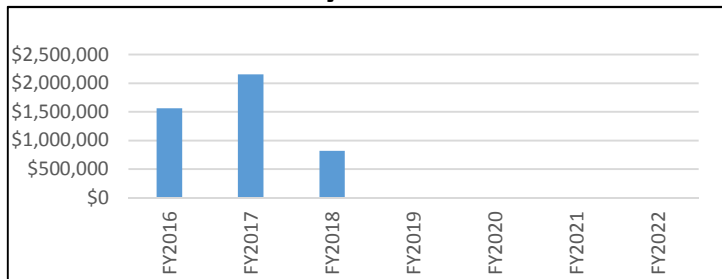
#### Project Description

This project includes the engineering, design and construction of a wireless network in all Metro rail stations to support ongoing operational activities and business initiatives. This project will also provide Metro personnel mobile access to internal applications.

#### Deliverables

- 1) Phase II of Wireless deployment - expansion of access points, installation of infrastructure hardware
- 2) QA testing of System Integrity and Performance delivery

#### Financial Summary



#### Milestones

- 1) Complete Rail Station Wireless rollout enabling WIFI access at all stations
- 2) Project Closeout FY2018

#### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	441	1,417	1,817	690	0	0	0	0	3,924	4,365
Non-Personnel	487	143	337	128	0	0	0	0	608	1,095
<b>Total Budget</b>	<b>928</b>	<b>1,560</b>	<b>2,154</b>	<b>818</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4,532</b>	<b>5,461</b>

#### Planned Funding Sources

As of 12/16/2015	FY2017
State of Good Repair	2,154
<b>Total</b>	<b>2,154</b>

Original FY11-FY16 Cost	Current FY11 - FY16 Cost
0	2,488

#### Variance Analysis

Project initiated FY2015

## WMATA FY2017 Capital Project Summary

### CIP0231 Relocation of Maintenance Departments from Rail Yards

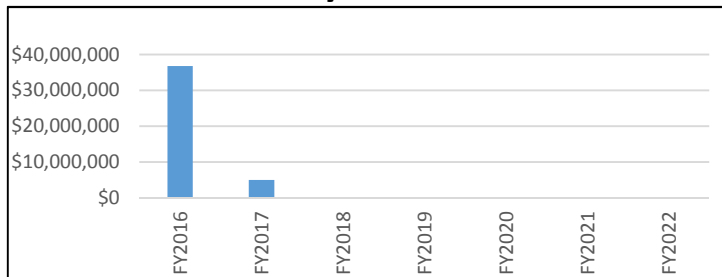
#### Project Description

This project will include the purchase of up to three existing warehouses or yard spaces to provide dedicated space for relocated maintenance departments displaced by rail yard projects and who are not required to be located in an active Metrorail yard.

#### Deliverables

- 1) Final Design Documents completed September 2016
- 2) Utility Installation completion December 2016
- 3) Substantial construction of warehouse, support and office space completed April 2017
- 4) Relocate departments to renovated building to begin June 2017

#### Financial Summary



#### Milestones

- 1) Purchase of property complete - January 2016
- 2) Renovations to begin December 2016
- 3) Renovations complete and Relocation of departments - June 2017

#### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	1	3,002	408	0	0	0	0	0	3,410	3,412
Non-Personnel	0	33,796	4,592	0	0	0	0	0	38,388	38,388
<b>Total Budget</b>	<b>1</b>	<b>36,798</b>	<b>5,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>41,798</b>	<b>41,800</b>

#### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
M25	5,000	0	36,800
<b>Total</b>	<b>5,000</b>		

#### Variance Analysis

Project initiation in FY2016



## WMATA FY2017 Capital Project Summary

### CIP0240 Bladensburg Garage

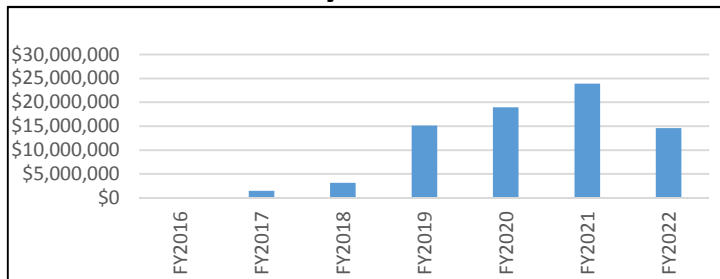
#### Project Description

This project will enhance the engineering, design and construction of a new 400-bus garage facility to replace the current Bladensburg and Northern Bus Garages. This project will require significant additional investment beyond FY2020.

#### Deliverables

- 1) Begin development of Environmental Analysis and Preliminary Design work
- 2) Develop Site Assessment and Project Plan

#### Financial Summary



#### Milestones

- 1) Commence Project development - July 2016

#### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	0	0	0	0	0	0	0	0	0	0
Non-Personnel	0	0	1,455	3,139	15,139	18,924	23,924	14,570	77,152	77,152
<b>Total Budget</b>	<b>0</b>	<b>0</b>	<b>1,455</b>	<b>3,139</b>	<b>15,139</b>	<b>18,924</b>	<b>23,924</b>	<b>14,570</b>	<b>77,152</b>	<b>77,152</b>

#### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
Federal Formula	1,455	0	0
<b>Total</b>	<b>1,455</b>		

#### Variance Analysis

Project not included in the original FY2011 funding plan, to begin in FY2017

## WMATA FY2017 Capital Project Summary

### CIP0241 Raising Vent Shafts Vicinity & Protecting System Core

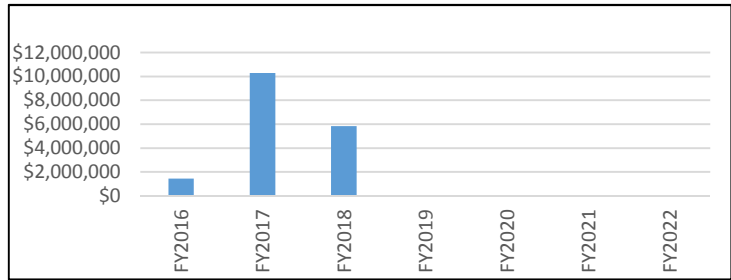
#### Project Description

This project will elevate vent shafts which will protect station from flood waters entering into the rail system. This project is funded the Federal Resiliency grant.

#### Deliverables

- 1) JOC projects completed. Full IFB contract to be advertised and NTP issued
- 2) Small flood design projects completed. Engineering tasks for site surveys and reports done
- 3) Permits issued for CSX, DCRA, DDOT

#### Financial Summary



#### Milestones

- 1) Advertise and Notice to Proceed awarded for full contract
- 2) All permits issued

#### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	70	209	1,108	828	0	0	0	0	2,146	2,215
Non-Personnel	0	1,237	9,192	5,011	0	0	0	0	15,440	15,440
<b>Total Budget</b>	<b>70</b>	<b>1,446</b>	<b>10,300</b>	<b>5,839</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>17,585</b>	<b>17,655</b>

#### Planned Funding Sources

As of 12/16/2015	FY2017
Resilience	10,300
<b>Total</b>	<b>10,300</b>

Original FY11-FY16 Cost	Current FY11 - FY16 Cost
0	1,516

#### Variance Analysis

Project was not in the original CFA

## WMATA FY2017 Capital Project Summary

### CIP0242 Improving Drainage

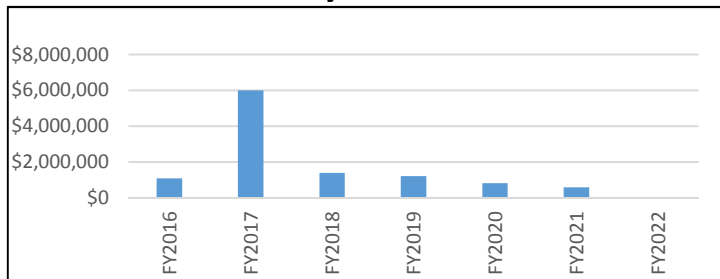
#### Project Description

This project will replace and improve drainage pumping stations to support the Drainage/Flood/Piping replacement program for Flood Resiliency improvements. This project will also replace and improve drainage pumping stations and sewage ejector systems that have exceeded their lifecycle throughout the Metrorail system. This project is funded by the Federal Resiliency grant.

#### Deliverables

- 1) Complete construction of Phase 1 Drainage Pumping Station (DPS) and Discharge lines (5 locations)
- 2) Complete design and construction of Phase 2 DPS and Discharge lines (5 locations)
- 3) Phase 1 comprised of: Metro Center, Van Ness, Mid River, Queen's Chapel and Greenbelt
- 4) Phase 2 comprised of: 7th & Mall, Pentagon, North Pentagon, South Pentagon and Forest Glen.

#### Financial Summary



#### Milestones

- 1) Complete construction of Phase 1 FY2017
- 2) Complete design and construction of Phase 2 FY2017

#### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	0	266	1,393	324	280	190	134	0	2,587	2,587
Non-Personnel	0	823	4,607	1,071	926	630	445	0	8,502	8,502
<b>Total Budget</b>	0	1,089	6,000	1,394	1,206	820	579	0	11,089	11,089

#### Planned Funding Sources

As of 12/16/2015	FY2017
Resilience	6,000
<b>Total</b>	<b>6,000</b>

Original FY11-FY16 Cost	Current FY11 - FY16 Cost
0	1,089

#### Variance Analysis

Project was not in the original CFA

## WMATA FY2017 Capital Project Summary

### CIP0246 General Engineering

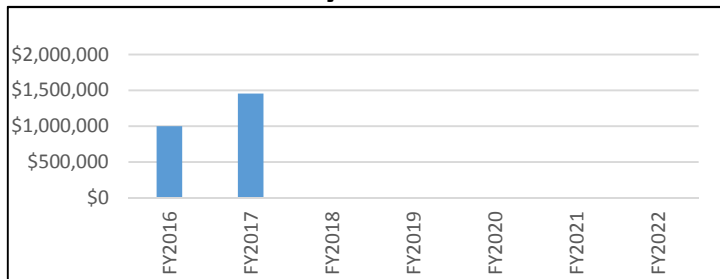
#### Project Description

Operational and maintenance problems arise where capital projects are required to implement solutions. This project provides for the development of architectural/engineering concept designs to help define capital projects needed to resolve operational and maintenance problems that are identified as priority issues by the Chief Engineer, Infrastructure Services.

#### Deliverables

1) Ongoing project to fund general engineering tasks, surveys and emergency engineering needs as identified

#### Financial Summary



#### Milestones

1) Ongoing engineering project with newly assigned tasks and milestones as needed

#### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	0	145	243	0	0	0	0	0	388	388
Non-Personnel	0	855	1,212	0	0	0	0	0	2,067	2,067
<b>Total Budget</b>	<b>0</b>	<b>1,000</b>	<b>1,455</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,455</b>	<b>2,455</b>

#### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
Federal Formula	824	0	1,000
Local	631		
<b>Total</b>	<b>1,455</b>		

#### Variance Analysis

Project was not in the original CFA

## WMATA FY2017 Capital Project Summary CIP0247 Emergency Construction

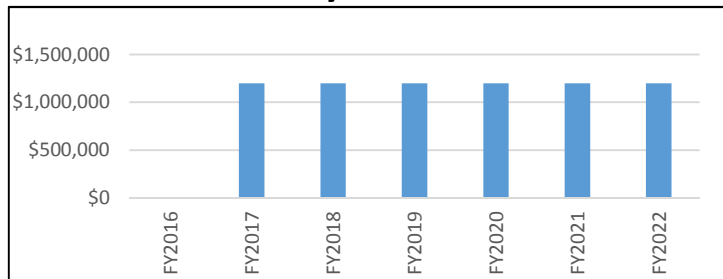
### Project Description

This project will issue procurement contracts including, but not limited to: repair of structural issues, urgent system repairs, correct safety hazards and emergency construction at various metro facilities.

### Deliverables

1) Ongoing contingency for unforeseen emergency construction needs

### Financial Summary



### Milestones

1) Ongoing construction project

### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 - FY2011 - FY2022	
									FY2016 - FY2022	FY2011 - FY2022
Personnel	0	0	380	380	380	380	380	380	2,278	2,278
Non-Personnel	0	0	820	820	820	820	820	820	4,922	4,922
<b>Total Budget</b>	<b>0</b>	<b>0</b>	<b>1,200</b>	<b>1,200</b>	<b>1,200</b>	<b>1,200</b>	<b>1,200</b>	<b>1,200</b>	<b>7,200</b>	<b>7,200</b>

### Planned Funding Sources

As of 12/16/2015	FY2017
Local	1,200
<b>Total</b>	<b>1,200</b>

Original FY11-FY16 Cost	Current FY11 - FY16 Cost
0	0

### Variance Analysis

No significant cost increases.

## WMATA FY2017 Capital Project Summary

# CIP0250 100% 8 Car Third Rail Upgrade and Replacement

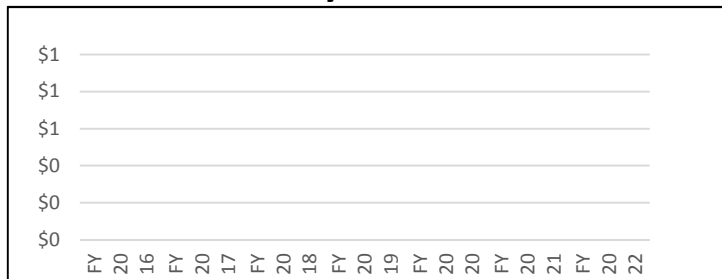
### Project Description

The 100% 8 car train program requires that all legacy contact rail (150 pound steel contact rail) be replaced with modern contact rail (84 pound aluminum and steel composite rail) which is twice as conductive as legacy contact rail. Track and Structures (TRST) replaces legacy contact rail with modern contact rail as a part of TRST's state of good repair (SOGR) program at a rate of five miles per year. TRST performs this task with force account labor. At the end of FY2015, 113 miles of legacy contact rail will require replacement prior to the completion of the 100% 8 car train program. TRST will continue replacing contact rail at the rate of five miles per year. This program is required to replace contact rail that TRST cannot replace as a part of

### Deliverables

1) No activity

### Financial Summary



### Milestones

1) No activity

### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 - FY2022	FY2011 - FY2022
Personnel	0	0	0	0	0	0	0	0	0	0
Non-Personnel	0	0	0	0	0	0	0	0	0	0
<b>Total Budget</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
		0	
<b>Total</b>	<b>0</b>	<b>0</b>	

### Variance Analysis

NO CIP sheet for FY2017

## WMATA FY2017 Capital Project Summary

### CIP0251 Automatic Train Control State of Good Repair

#### Project Description

The Automatic Train Control (ATC) rooms and associated Train Control Room (TCR) and wayside equipment are aging. Obsolete and/or worn out equipment need to be replaced on various lifecycles varying from 20 to 40 years. The equipment categories are track circuits, Non Vital Processors, ATC Cables, switch machines, other types of TCR equipment (power supplies, etc.), and other types of wayside equipment (loops, junction boxes, snowmelters, signals, signs, etc.). This work shall include the mainline stations and the Storage & Inspection (S&I) yards.

#### Deliverables

- 1) High Frequency Track Circuit (HFTC) cable replacement at 95,000 feet
- 2) Replace 20 mainline switches and install 18 M6 switch machines
- 3) Corrosion Control stray current testing at 15 locations
- 4) Complete Phase 2 of the Asset Management Plan.

#### Financial Summary



#### Milestones

- 1) Design completion March 2017
- 2) Award Train Control rehabilitation contract for 10 priority locations

#### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 - FY2022	
									FY2016 - FY2022	FY2011 - FY2022
Personnel	0	5,374	7,565	5,799	6,365	6,708	6,939	7,061	45,810	45,810
Non-Personnel	0	2,428	6,935	13,976	14,672	17,127	15,395	14,458	84,992	84,992
<b>Total Budget</b>	<b>0</b>	<b>7,802</b>	<b>14,500</b>	<b>19,775</b>	<b>21,037</b>	<b>23,834</b>	<b>22,334</b>	<b>21,519</b>	<b>130,802</b>	<b>130,802</b>

#### Planned Funding Sources

As of 12/16/2015	FY2017
Debt	14,500
<b>Total</b>	<b>14,500</b>

Original FY11-FY16 Cost	Current FY11 - FY16 Cost
0	7,802

#### Variance Analysis

Project was not in the original CFA

## WMATA FY2017 Capital Project Summary

### CIP0252 AC Power Systems State of Good Repair

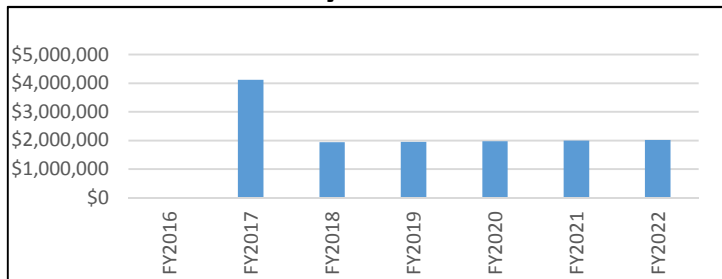
#### Project Description

This project consists of continuously improving and maintaining existing AC power systems in a State of Good Repair (SOGR) in order to deliver safe and reliable Metrorail operations. Obsolete and/or worn out equipment needs to be replaced on various life-cycles varying from 18 to 40 years. The equipment SOGR categories are switchgears, panel boards, transformers, cables, motor control centers, battery banks, lighting, generators, uninterruptible power systems (UPS) and associated conduit and connection equipment.

#### Deliverables

- 1) Complete condition assessments and design activities
- 2) Purchase of equipment and materials (Q4 FY2017) in preparation for first set of (4) AC Switchboard Rooms
- 3) Material acquisition for the installation of feeder cables

#### Financial Summary



#### Milestones

- 1) Completion of condition assessment and design tasks
- 2) Completion of 4 AC Switchboard Rooms per fiscal year

#### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	0	0	1,525	842	860	879	899	919	5,924	5,924
Non-Personnel	0	0	2,595	1,096	1,096	1,096	1,096	1,096	8,076	8,076
<b>Total Budget</b>	<b>0</b>	<b>0</b>	<b>4,120</b>	<b>1,938</b>	<b>1,956</b>	<b>1,975</b>	<b>1,995</b>	<b>2,015</b>	<b>14,000</b>	<b>14,000</b>

#### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
Local	4,120	0	0
<b>Total</b>	<b>4,120</b>		

#### Variance Analysis

Project was not in the original CFA



## WMATA FY2017 Capital Project Summary

### CIP0253 Traction Power State of Good Repair

#### Project Description

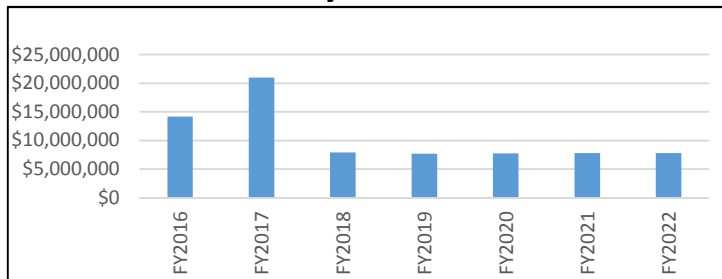
The program will provide for power equipment replacements of traction power related components which are beyond or nearing the end of their useful life to maintain a reliable traction power system.

The specific equipment to be replaced within substations are: AC and DC switchgears, AC transformers, Rectifier transformers, AC and DC panel boards, uninterruptible power systems (UPS), batteries and battery chargers, automatic voltage regulators, relays, bus duct, conduit, wire and associated installation / support equipment.

#### Deliverables

- 1) Install permanent solution for Stadium Armory Traction Power Sub-station (TPSS)
- 2) Complete 1 Tie Breaker Station (TBS), 1 Traction Power Sub-station (TPSS), 30,000 feet of cabling
- 3) Complete evaluation, design, and procurement for Stadium Armory

#### Financial Summary



#### Milestones

- 1) Completion of design, procurement and installation of Stadium Armory TPSS
- 2) Ongoing state of repair work for traction power

#### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	0	6,718	6,034	1,751	1,588	1,624	1,662	1,700	21,077	21,077
Non-Personnel	0	7,455	14,966	6,178	6,124	6,124	6,124	6,124	53,096	53,096
<b>Total Budget</b>	<b>0</b>	<b>14,173</b>	<b>21,000</b>	<b>7,929</b>	<b>7,712</b>	<b>7,749</b>	<b>7,786</b>	<b>7,824</b>	<b>74,173</b>	<b>74,173</b>

#### Planned Funding Sources

As of 12/16/2015	FY2017
Debt	21,000
<b>Total</b>	<b>21,000</b>

Original FY11-FY16 Cost	Current FY11 - FY16 Cost
0	14,173

#### Variance Analysis

Project was not in the original CFA

## WMATA FY2017 Capital Project Summary

### CIP0258 Fire Alarm System Upgrade Project to Meet NFPA72

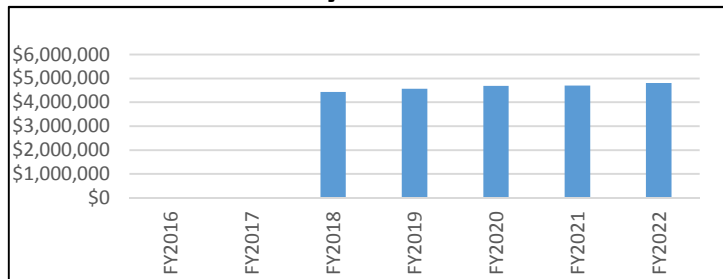
#### Project Description

The system wide fire alarm upgrade will address the forthcoming NTSB recommendation that requires stations to be compliant with the latest version of NFPA 72 and 130. The WMATA Fire Marshal has requested that the fire alarm system throughout the rail system be upgraded/replaced. WMATA will improve the life safety equipment and systems to continue to meet expectations and requirements.

#### Deliverables

1) Project to begin this CIP in FY2018

#### Financial Summary



#### Milestones

1) Design and award of contract in FY2018

#### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 - FY2022	FY2011 - FY2022
Personnel	0	0	0	1,353	1,394	1,436	1,361	1,373	6,916	6,916
Non-Personnel	0	0	0	3,080	3,168	3,258	3,346	3,436	16,288	16,288
<b>Total Budget</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4,433</b>	<b>4,561</b>	<b>4,694</b>	<b>4,707</b>	<b>4,810</b>	<b>23,204</b>	<b>23,204</b>

#### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
		0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>

#### Variance Analysis

Project was not in the original CFA

## WMATA FY2017 Capital Project Summary

### CIP0265 New Project - Traffic Signal Prioritization

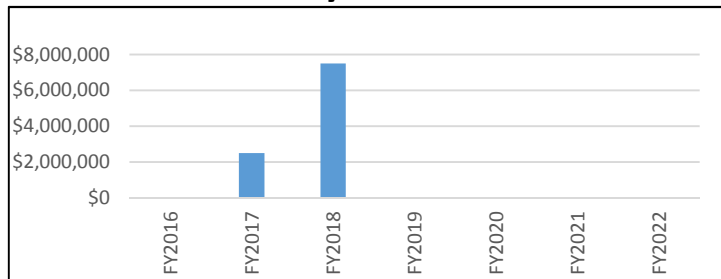
#### Project Description

This project supports the expansion of Traffic Signal Prioritization on select Priority Corridors. In an effort to increase Bus delivery efficiency and improve the ridership experience Signal prioritization will decrease route times, improve route coverage and impact peak ridership delivery

#### Deliverables

1) FY2017 - No planned activities

#### Financial Summary



#### Milestones

1) FY2018 - Development and implementation of Signal Prioritization on select corridors  
2) Complete Signal Prioritization on selected corridors, Analyze additional opportunities

#### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	0	0	657	2,111	0	0	0	0	2,767	2,767
Non-Personnel	0	0	1,843	5,389	0	0	0	0	7,233	7,233
<b>Total Budget</b>	<b>0</b>	<b>0</b>	<b>2,500</b>	<b>7,500</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10,000</b>	<b>10,000</b>

#### Planned Funding Sources

As of 12/16/2015	FY2017	Original FY11-FY16 Cost	Current FY11 - FY16 Cost
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>

#### Variance Analysis

Project initiation FY2018
---------------------------

## WMATA FY2017 Capital Project Summary

### CIP0266 New Project - Asset Condition Assessment to Drive CNI

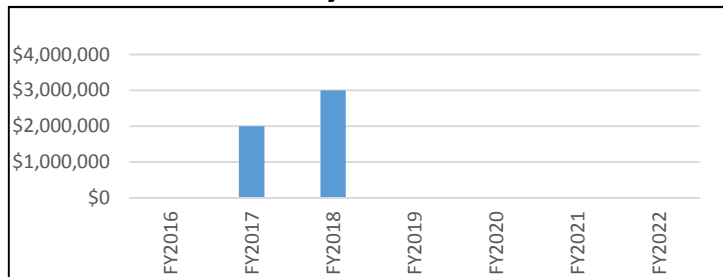
#### Project Description

This project will support an assessment of the current condition of WMATA assets to enable FTA compliant ranking of funding needs for the next Capital Needs Inventory (CNI).

#### Deliverables

- 1) FY2016 Develop procurement package for contract to audit Capital Inventory and establish needs
- 2) July 2016 - Award Contract
- 3) November 2016 - Submittal of Initial findings, feedback and follow up items
- 4) June 2017 - Plan implementation

#### Financial Summary



#### Milestones

- 1) FY2017 Complete initial Assessment of Asset Condition for the updated Capital Needs Inventory

#### Project Financials

Budget (in 000s)	FY11-FY15	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2016 -	FY2011 -
									FY2022	FY2022
Personnel	0	0	610	844	0	0	0	0	1,454	1,454
Non-Personnel	0	0	1,390	2,156	0	0	0	0	3,546	3,546
<b>Total Budget</b>	<b>0</b>	<b>0</b>	<b>2,000</b>	<b>3,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5,000</b>	<b>5,000</b>

#### Planned Funding Sources

As of 12/16/2015	FY2017
State of Good Repair	2,000
<b>Total</b>	<b>2,000</b>

Original FY11-FY16 Cost	Current FY11 - FY16 Cost
0	0

#### Variance Analysis

Project initiated FY2016
--------------------------

Summary of Reimbursable Capital Projects: FY2017 - Active Projects  
(dollars in millions)

	Approved Budget	Prior Years Actuals	FY2016 Forecast	FY2017 - FY2022 Plan						FY2011-22 Total
				FY2017 Proposed	FY2018 Plan	FY2019 Plan	FY2020 Plan	FY2021 Plan	FY2022 Plan	
<b>District of Columbia</b>										
CRB0129 Congress Heights Bus Loop Design	\$0.3	\$0.0	\$0.2	\$0.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.3
CRB0128 Minnesota Avenue Parking Garage Repairs	0.7	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	\$0.7
Regional										
CRB0005 Project Development	20.0	11.2	1.1	2.2	1.1	1.1	1.1	1.1	1.1	\$20.0
DC Subtotal	\$21.0	\$11.2	\$1.2	\$3.1	\$1.1	\$1.1	\$1.1	\$1.1	\$1.1	\$21.0
<b>Maryland</b>										
Maryland-wide										
CRB0009 Project Development	17.6	8.9	1.1	2.2	1.1	1.1	1.1	1.1	1.1	\$17.5
CRB0127 MTA Purple Line	4.8	0.0	0.0	4.7	0.0	0.0	0.0	0.0	0.0	\$4.7
Maryland Subtotal	\$22.3	\$8.9	\$1.1	\$6.9	\$1.1	\$1.1	\$1.1	\$1.1	\$1.1	\$22.2
<b>Virginia</b>										
Alexandria City of										
CRB0013 Potomac Yard Alternative Analysis	11.6	4.0	5.8	0.6	0.0	0.0	0.0	0.0	0.0	\$10.4
Virginia-wide										
CRB0018 Project Development	14.7	7.9	0.8	1.8	0.8	0.8	0.8	0.8	0.8	\$14.7
CRB0019 Dulles Extension Design/Build	293.9	169.5	51.5	66.7	2.8	0.0	0.0	3.2	0.0	\$293.7
CRB0020 Dulles Phase 2	308.8	44.5	16.7	128.0	81.1	11.9	26.6	0.0	0.0	\$308.8
Virginia Subtotal	\$629.0	\$225.9	\$74.8	\$197.1	\$84.8	\$12.7	\$27.4	\$4.0	\$0.8	\$627.6
<b>All Jurisdictional and Other Partners</b>										
CRB0130 Smart Trip Express Recharges	8.7	0.0	2.4	5.7	0.0	0.0	0.0	0.0	0.0	\$8.1
All Jurisdiction Subtotal	\$8.7	\$0.0	\$2.4	\$5.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$8.1
<b>Grand Total</b>	<b>\$681.1</b>	<b>\$246.1</b>	<b>\$79.5</b>	<b>\$212.8</b>	<b>\$86.9</b>	<b>\$14.9</b>	<b>\$29.6</b>	<b>\$6.2</b>	<b>\$3.0</b>	<b>\$679.0</b>

## Appendix B Human Capital Summary

Human capital management is a way of defining and categorizing employees' skills and abilities and ensuring that those skills and abilities are used to accomplish the goals and objectives of the organization. At Metro, the management of human capital involves workforce planning and investment, and it is aligned with the strategic plan and integrated with the core mission of operating and maintaining a safe, reliable, and effective transit system.

Human capital is measured not only by the number of people employed, but also by the various costs associated with such employment, often referred to as personnel costs. Metro's personnel costs fall into two major categories: labor and fringe benefits.

Labor costs, which include regular wage and overtime pay for operations employees, as well as salary expense for management, professional, and administrative personnel, make up approximately 69.0 percent of total personnel costs. The proposed Authority-wide FY2017 labor budget is \$1.1 billion.

Fringe benefit costs are the personnel-related expenses incurred by an employer that are above and beyond the direct cost of employee wages and salaries. Metro's fringe benefits are comprised of health insurance and pension plans required by collective bargaining agreements to retain a professional workforce. Fringe benefits also include government mandated costs such as unemployment insurance and payroll taxes. The proposed Authority-wide FY2017 fringe benefit budget is \$503.0 million. FY2017 proposed budget is \$13.8 million less than FY2016 due to a 9.0 percent, or \$16.5 million, reduction of retirement costs. This reduction was largely the result of two developments: the provision in the latest negotiated agreement between WMATA and Amalgamated Transit Union's Local 689, the bargaining unit for station managers and most operator and maintenance personnel, whereby the represented employees are now required to contribute to their retirement plan; and the nonfunding of Other Post Employee Benefits (OPEB), budgeted at \$11 million in FY2016. In the fall of 2015, the Board provided guidance to continue the current methodology of pay-as-you-go for retiree health insurance costs, in lieu of setting up a trust to manage the ongoing retiree health care liability.

The following tables provide a detailed, three-year comparison of total human capital requirements for Metro. The proposed staffing requirement for FY2017 is 13,054, consisting of 11,561 operating positions, 1,455 capital positions and 38 positions funded by reimbursable projects. The FY2017 proposed budget includes a 0.5 percent increase in headcount (59 positions) over Metro's approved headcount for FY2016 primarily due to Safety Management Initiatives. The table below shows a breakdown, by department, of the staffing levels for FY2015 - FY2017.

**Human Capital by Department**

<b>DEPARTMENT</b>	<b>Approved FY2015</b>	<b>Approved FY2016</b>	<b>Proposed FY2017</b>	<b>Change from FY2016 to FY2017</b>
General Manager	4	4	4	-
Equal Employment Opportunity	-	11	12	1
Chief of Staff	32	32	31	(1)
Inspector General	34	34	36	2
General Counsel	48	48	48	-
Board of Secretary	5	5	4	(1)
Office of Performance	7	8	8	-
Bus Services	4,177	4,183	4,173	(10)
DGMO				
Deputy General Manager	148	147	232	85
Transit Infrastructure and Engineering Services	4,921	5,004	5,004	-
Rail Services	1,663	1,661	1,661	-
Access	56	56	53	(3)
Labor Relations <sup>1</sup>	-	-	16	16
New Electronic Payments Programs	-	5	11	6
Parking	-	13	13	-
Financial Services	371	367	275	(92)
Procurement <sup>2</sup>	-	-	89	89
Human Resources	141	143	138	(5)
Information Technology	357	351	325	(26)
Metro Transit Police	745	729	726	(3)
Safety	66	67	66	(1)
Customer Service, Communications & Marketing	130	127	129	2
<b>TOTAL</b>	<b>12,905</b>	<b>12,995</b>	<b>13,054</b>	<b>59</b>

<sup>1</sup> In FY2016, Procurement was moved from Financial Services and established as an independent department that reports to the General Manager.

<sup>2</sup> The Office of Labor Relations is now being reported as a separate office under the DGMO. In FY2016, it was bundled with other offices under 'Deputy General Manager'.

A detailed, three-year comparison of total human capital requirements and costs for the operating and capital budgets is also presented below.

### Human Capital Summary – All Modes

	FY2015 Approved Budget	FY2016 Approved Budget	FY2017 Proposed Budget	Change from FY2016 to FY2017
<b>POSITIONS</b>	<b>12,905</b>	<b>12,995</b>	<b>13,054</b>	<b>59</b>
<b>PAYROLL</b>	<b>\$1,045,949,681</b>	<b>\$1,084,718,301</b>	<b>\$1,090,876,466</b>	<b>\$6,158,164</b>
Health Care	\$197,584,852	\$209,985,794	\$222,390,830	\$12,405,036
Taxes -- FICA	\$79,539,103	\$81,918,916	\$84,462,716	\$2,543,800
Pension -- Defined Benefit	\$163,161,750	\$163,042,250	\$150,555,631	(\$12,486,619)
Pension -- Defined Contribution	\$14,955,800	\$16,103,500	\$12,193,317	(\$3,910,183)
OPEB Trust Contribution	\$4,000,000	\$11,000,000	\$0	(\$11,000,000)
Life Insurance	\$1,741,999	\$1,650,000	\$2,035,931	\$385,931
Long Term Disability	\$649,999	\$1,125,000	\$1,244,575	\$119,575
Taxes -- Unemployment	\$600,000	\$1,150,000	\$1,155,081	\$5,081
Workers Comp Assessment	\$2,552,600	\$2,552,600	\$1,508,576	(\$1,044,024)
<b>Total Allocated Fringe Benefits</b>	<b>\$464,786,104</b>	<b>\$488,528,060</b>	<b>\$475,546,658</b>	<b>-\$12,981,402</b>
Unallocated Fringe Benefits and Workers' Compensation	\$27,186,223	\$27,757,813	\$26,972,080	(\$785,733)
<b>TOTAL FRINGE BENEFITS</b>	<b>\$491,972,326</b>	<b>\$516,285,873</b>	<b>\$502,518,738</b>	<b>-\$13,767,135</b>

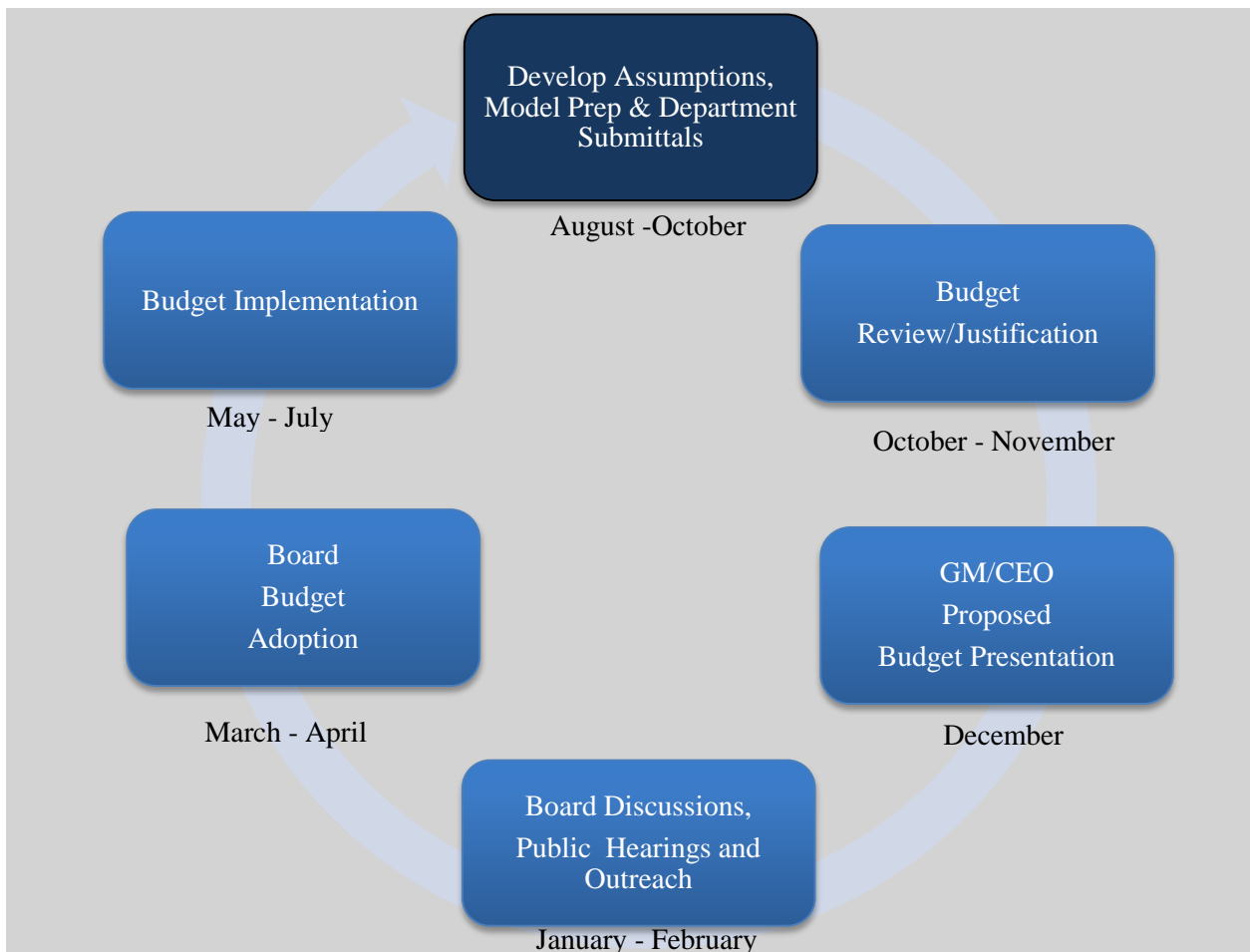
Fringe Benefits Annual Budgeting Rates	FY2015 Approved Budget	FY2016 Approved Budget	FY2017 Proposed Budget	Change from FY2016 to FY2017
Average Annual Pay	\$81,050	\$83,472	\$83,566	\$94
Average Full Fringe Cost	\$38,123	\$39,730	\$38,495	-\$1,234
Full Fringe Rate	47.0%	47.6%	46.1%	-1.5%



## Appendix C Budget Process

Metro’s annual budget serves as the foundation for its financial planning and control. The General Manager, Chief Financial Officer and staff prepare and submit the budget to the Board of Directors for consideration and approval. The annual budget consists of three components: operating, capital, and reimbursables. It is the responsibility of each department to administer its operations in such a manner to ensure that the use of the funds is consistent with the goals and programs authorized by the Board and that approved spending levels are not exceeded.

Metro’s budget planning begins in August of the preceding fiscal year with the development of budget priorities and assumptions for the plan year. The fiscal year begins on July 1; the budget is adopted and implemented by June 30. The Budget Process is consist of six major phases: 1) model preparation and development of key assumptions and drivers; 2) budget formulation (which includes department submissions); 3) budget review/justification; 4) presentation of the proposed budget to the Board, Board discussions, public hearings and outreach; 5) budget adoption by the Board; and 6) budget implementation/amendment (see below figure).



### ***Budget Development and Departmental Submissions***

Metro began the process of developing the FY2017 proposed budget shortly after the adoption of the FY2016 approved budget. As part of the budget development process, the FY2015 Actuals with specific programmatic changes was used as the FY2017 baseline for budgeted non-personnel related costs. Additionally, the FY2016 Approved budget (and the FY2015 Actuals) were analyzed and certain identified assumptions were modified. Some of those assumptions were fuel prices, contractually obligated union wages and benefits, and fare revenues. Based on the analysis of the aforementioned data, Metro assigned targets to each department. Simultaneously, Metro pursued additional Federal, state and local revenue and grants.

The FY2017 proposed budget was balanced through a combination of expense efficiencies, including preventive maintenance and overhaul utilization through the CIP, offset by realignment of revenue based on projected ridership. Below are additional assumptions that were incorporated into the development of the FY2017 proposed budget.

- Using the Strategic Plan (the “Plan”) framework, the General Manager/CEO’s Business Plan guides both Operating and Capital budget development processes. It identifies priorities for Metro, provides the foundation for department-specific work plans and keeps the agency focused on the long term goals as outlined in the Strategic Plan.
- The CEO’s Business Plan outlines necessary actions to achieve priorities; provides measures to monitor success, and provides the Board and public with a transparent and accountable framework.
- The priorities are reflected in the proposed FY2017 Budget and multi-year operating and capital investment plans.
- The Office of Management and Budget Services (OMBS) staff develops guidelines and assumptions in line with the General Manager’s business plan that drive the budget planning process. These guidelines and assumptions are then passed along and incorporated into the department budgets.
- The initial planning, development of assumptions, preparation of instructions and training materials are created in August.
- The annual budget kickoff meeting is held in September with all department leaders and budget preparers. New budget initiative requests are developed at this time.
- The department operating and capital budget requests are developed, reviewed, and approved (at the department level) and submitted to OMBS by mid-October.

### ***Budget Review and Proposal***

- The proposed CIP was developed concurrently with the proposed operating budget. OMBS and the AGM-TIES meet with every project manager to review the capital forecasts and requests. Recommendations for the update to the CIP were reviewed with executive management in November 2015.

- Operating and Capital budget requests are reviewed by OMBS and the Executive Leadership Team (ELT). The proposed budget recommendations are presented to the General Manager/CEO in November.
- Once the GM/CEO has approved the annual Budget Proposal and Multi-Year plans, they are presented to Board of Directors during the December meeting. They are also released to the public in December.

### ***Budget Discussion and Adoption***

- The budget is presented and reviewed at the Finance and Administration Committee meeting and the full Board will deliberate through the winter and early spring.
- Metro undertakes significant outreach efforts regarding the budget, including proposed service changes, prior to adoption. The outreach occurs in three key areas:
  - *Public hearings:* During the Budget Process, Metro holds at least one public hearing to review any proposed service and/or fare changes, as well as the proposed use of federal funding in the CIP. The comments and feedback received from residents throughout the region is presented to the Board for consideration.
  - *Public participation:* Metro's Public Participation Plan guides substantial additional outreach efforts beyond the public hearings; including open houses, station pop-ups, and community events. The outreach will provide specific and convenient opportunities for riders and local organizations to provide input and discuss their views. It will ensure full and fair participation for all potentially affected communities, including minority, low-income, and limited English proficient populations.
  - *Rider survey:* Metro also conducts an online survey to solicit rider input on key questions regarding the budget and fare policy.
- Metro staff summarizes data collected from these efforts, as well as all public comments/feedback received during the outreach process in a Staff Report that is delivered to the Board for review.
- Collectively, Metro's outreach efforts meet or exceed the requirements of both the WMATA Compact and the Federal Transit Administration's newly expanded Title VI guidelines.

### ***Amendments***

- When necessary, amendments to the budget are presented to the Finance and Administration Committee.
- The Finance and Administration Committee will present amendments to the Board for review, approval and adoption.

### ***Budget Implementation***

- Preparation and implementation of the adopted budget occurs between May and June.
- The FY2017 proposed budget becomes effective on July 1, 2016.
- Monthly budget variance reports are prepared by OMBS to enable management to monitor and control expenses and revenues.

- Quarterly financial reports are also prepared by OMBS and presented by Management to the Board of Directors.
- These reports are used to monitor financial performance and ensure compliance with the approved budget.

### ***Budget Basis***

The underlying financial statements guiding this budget process have been prepared in accordance with Generally Accepted Accounting Principles (GAAP) Per the Governmental Accounting Standards Board Statement No. 34 (Basic Financial Statements – and Management’s Discussion and Analysis – For State and Local Governments), all financial information is consolidated into business-type activities that make up Metro’s Enterprise Fund. These businesses-type activities include transit operating and capital costs, infrastructure construction and debt activities.

The budget is also based upon the provisions of Generally Accepted Accounting Principles (GAAP), as applicable to government entities in the United States of America. Annual budgets are adopted in accordance with GAAP with the following exceptions:

- Depreciation and amortization are excluded, and
- Net actuarial determined post-employment benefit obligation recognized under Government Accounting Standards Board (GASB) Statement No. 45, which was implemented by Metro in FY2008, has been excluded from the budget expenses; such costs are included in operating expenses in the annual financial statements but are not budgeted.

The annual budget is developed on the basis of two budget methodologies – Continuation-level and Zero-based. Continuation-level budgeting is used to develop the funding and resources necessary to sustain multi-year critical operating, special programs, and previously approved capital projects. The agency switched from an Incremental to a hybrid Zero-based budgeting approach for the development of the FY2017 Operating budget. The Zero-based approach was used to determine resources for on-going general and administrative expenses, new programs and capital projects. In accordance with the Financial Standards, OMBS monitors revenues and budget expenditures throughout the fiscal year.

### **Metro’s Enterprise Fund**

The Enterprise Fund is the sole fund for Metro. Within this Fund, income sources are classified in one of six categories: passenger fares and parking revenues, federal funds, state and local funds, business revenues, other sources and debt. Passenger fares and parking is the largest of the six categories. Federal funds consist of Federal grants and funds to support the capital program. State and local funds support the capital program, as well as debt service and the operating budget subsidy. Business revenues include advertising and joint development, among other funding sources.

### **Balanced Operating Budget**

Metro is required to annually adopt a balanced operating budget where operating revenues and subsidies equal expected operating expenses for the fiscal year. In accordance with Article VIII of Metro’s Compact, the Board annually adopts a current expense budget for each fiscal year. Based

on the Compact, the budget includes the Board's estimated expenditures for administration, operation, maintenance and repairs, debt service requirements and payments to be made into any funds required to be maintained.

The total expenditures are balanced by the Board's estimated revenues and receipts from all sources, excluding funds included in the capital budget or otherwise earmarked for other purposes. At the end of the fiscal year, if there is an operating deficit, the local jurisdictions are billed on July 1 for their respective contributions.

The focus of the operating budget is on the personnel, material/supplies and services necessary to operate Metrobus, Metrorail, and MetroAccess. Budgetary issues for the operating budget center on the cost of continuing operations, expanding services to meet growing demand, and improving efficiency of service.

### **Capital Budget**

In accordance with Article VIII, paragraph 26 of Metro's Compact, the Board adopts an annual capital budget. This budget specifies all capital projects that are expected to commence or continue during the budget period. The budget also provides the estimated cost of each project and an explanation of its planned funding sources.

The primary focus of the capital budget is safety and the condition of Metro's current assets and infrastructure, and what is needed to maintain them in a state of good repair. The capital budget makes the reliable, continuous and safe operation of each mode (Metrobus, Metrorail and MetroAccess) possible.

### **Capital Expenditures**

Capital expenditures are those that will lead to some future benefit beyond the current fiscal year. Expenditures are classified as capital when an entity spends money either to procure fixed assets, or to improve and extend the useful life of an existing fixed asset.

The capital budget process assists the agency's leadership in making decisions regarding the assets and infrastructure required to support and/or grow the bus, rail, and paratransit operations. Metro's assets and infrastructure include, but are not limited to:

- Buses
- Railcars
- Stations and Tunnels
- Track and Wayside
- Administration and Maintenance facilities
- Signal and Power systems

---

**FY2017 BUDGET CALENDAR**

- August** Initial planning, development of assumptions, preparation of instructions and training materials for the Operation and Capital Budgets begin in August.
- September** The FY2017 budget kickoff meeting and system training classes are held with all departments. A review of FY2015 year-end results were presented to the Board for information.
- October** Project managers work collaboratively with OMBS to update project forecasts for current year and future year expenses. The updated forecasts are informed by the most current project schedules and cost estimates.
- November/December** Departments submit their budget requests to OMBS. The CIP budget is developed concurrently with the annual Operating budget. The CIP recommendations are reviewed with executive management and the Annual Work Plan (AWP) is released to the jurisdictional partners. Presentation of proposed budget to the Finance and Administration Committee.
- January/February** Board Discussions and public participation.
- March - April** Findings from public participation are summarized and presented to the board. Updated Operating and Capital budgets are prepared for Board approval.
- April** Approval of the FY2017 annual budget.

## Appendix D Financial Standards

The Financial Standards are divided into three sections: general, business planning parameters, and debt policy. The purpose of the general standards is to ensure that Metro prudently manages its financial affairs and establishes appropriate cash reserves. The business planning parameters provide management with a framework for developing the upcoming year's budget and other longer-term financial plans, as well as establishing future business targets for management to achieve. The purpose of debt policy standards is to limit the level of debt that may be incurred and to ensure that debt assumptions are based on financial parameters similar to or more conservative than those that would be placed on Metro by the financial marketplace. Actual debt covenants may differ from these standards, and in accordance with the debt policy, the actual covenants will be disclosed in any Board report supporting a debt issuance.

### *Financial Standards – General*

#### **GAAP**

- Complete and accurate accounting records are maintained in accordance with Generally Accepted Accounting Principles (GAAP) as required by the Government Accounting Standards Board.

#### **Revenue and Expenditure Recognition**

- Revenues are recognized in the period that they are earned and expenses are recognized in the period in which they are incurred. Metro distinguishes between operating and non-operating revenues and expenses in its financial statements.
- The principal source of operating revenues (not including state or local operating subsidy contributions) is passenger fares and parking fees, which make up approximately 90 to 95 percent of such revenues.

#### **Fiscal Year**

- The fiscal year-end for financial reporting purposes is June 30. The Board approves the budget for each fiscal year by June 30 of the previous year.

#### **Audited Comprehensive Annual Financial Report (CAFR)**

- An independent certified public accounting firm performs an examination of Metro's consolidated financial statements, including Single Audit requirements. The goal is to receive an unqualified opinion on the financial statements and an opinion that Metro is in compliance with the Federal Single Audit requirements in all material respects and to receive the Government Finance Officers Association (GFOA) award for excellence in reporting.

#### **Other Financial Policies and Guidelines**

- Funds are invested within the guidelines of the Board's approved investment policies and in compliance with the investment guidelines in Metro's Compact.

- In accordance with Board Resolution No. 81-36, designated Metro officials are empowered to open, close or authorize changes to accounts and authorized to appoint individuals as official signatories for financial accounts.
- An annual actuarial analysis is performed on all Metro-administered pension plans. Based on the results of such analysis, Metro makes contributions as required in agreement with the terms of each plan.
- Appropriate insurance coverage is maintained to mitigate the risk of material loss. For self-insured retentions, Metro records the liabilities, including losses incurred but not reported, at 100 percent of the net present value.
- The budget includes operating, capital, and other components necessary to implement the policy directions contained in previously Board-adopted longer-term plans. The operating budget spans a 12-month period, and funding for the capital budget carries over from one fiscal year to the next. The budget is prepared in a fashion to clearly describe the projects and programs for the period.
- Metro engages in regional long-range transportation planning for the Washington metropolitan area in conjunction with the National Capital Region Transportation Planning Board (TPB) and other jurisdictional partners. Staff provides transit system inputs to TPB for the Constrained Long-Range Plan (CLRP) and identifies changes affecting the major financial assumptions of the plan and progress toward the implementation of new projects and programs.
- Metro also engages in short-range transit planning for the Washington metropolitan area. Staff provides inputs to the region's six-year Transportation Improvement Program (TIP) and identifies the capital investment needs to support the existing regional transit system and regional service expansion.
- The Office of Inspector General (OIG) develops an annual work plan each year. The Board's Audits and Investigations Committee provides input and approves the work plan, which covers audits, evaluations, and investigations. Furthermore, completed audit and evaluation reports are submitted to the Board via the Audits and Investigations Committee.
- Recommendations for improvements are based on audits and evaluations performed by the OIG. Audits are performed in accordance with *Government Auditing Standards*, while evaluations are performed in accordance to the Council of the Inspectors General on Integrity and Efficiency's *Quality Standards for Inspection and Evaluation*. These recommendations, management's action plans and progress toward implementation are periodically reported directly to the Board. Semi-annual reports to the Board and significant stakeholders provide an overview of work performed by the OIG as related to the annual work plan.

### ***Financial Standards – Business Planning Parameters***

- Passenger revenue forecasts are derived from historical ridership and revenue trends as well as forecasts of regional growth in population and employment. If ridership may be affected by actual or proposed fare policy change, the impacts on ridership and average fare forecasts are based on conservative estimates.
- The Board reviews and updates the fare policy on a regular cycle. Management may propose fare modifications to achieve transit ridership improvements as well as to maintain financial sustainability.



- Service plan assumptions for bus operations are based on demonstrated needs as defined through short-range planning.
- Capital programs are funded according to the terms of the laws, regulations and/or discretionary procedures approved by the Board. The capital program covers Metro's assets, including major transportation projects, and is included in each annual budget.
- From time to time, Metro applies for and receives discretionary Federal and state funding. Discretionary funding is requested for major system expansion projects or extraordinary transit capital needs. Discretionary funding levels are estimated by project, based on appropriate state and Federal criteria and the likelihood of obtaining approvals.

### ***Financial Standards – Debt Policy***

- Metro may not enter into a debt or financing arrangement unless the transaction is in full compliance with all applicable provisions of Metro's Compact.
- Pursuant to Metro's Compact, Article IX paragraph 27, Metro may borrow money in pursuit of its mission. All such bonds and evidences of indebtedness is authorized by resolution of the Board and is payable solely out of the properties of revenues of Metro. The bonds and other debt obligations of Metro, except as may be otherwise provided in the indenture under which they are issued, are direct and general obligations of Metro and the full faith and credit of Metro are pledged for the prompt payment of the debt service.
- There is no borrowing limit set in Metro's Compact.
- Long-term debt may be included in the budget or long range plans; however, no such debt is incurred without the specific approval of the Board.
- The average life of debt instruments is approximately equal to or less than the average of the useful lives of the assets financed.
- Reserve funds that may be required by the financial markets for each debt issuance are maintained. Cash and securities, insurance or surety bonds may fund these reserves. For Financial planning purposes, reserve requirements are included in the face value of debt issued.

## Allocation of State and Local Support

State and local funds account for approximately 45 percent of the funding for Metro's annual operating and capital budgets according to the approved subsidy calculations, described below.

### *Operating Budget*

The operating budget subsidy is allocated to the jurisdictional funding partners using six subsidy allocation formulas:

1. Regional bus subsidy allocation
2. Non-regional bus subsidy allocation
3. Rail maximum fare subsidy allocation
4. Rail base subsidy allocation
5. Paratransit subsidy allocation
6. Debt service allocation

### **Formulas 1 and 2: Regional and Non-Regional Bus Subsidy Allocations**

The Metrobus subsidy is allocated using two distribution formulas. All bus routes are classified as being either regional or non-regional, based on route characteristics.

Regional bus routes generally provide transportation between jurisdictions. Regional bus routes may also include bus routes that serve major activity centers that operate on major arterial streets, and carry high volumes of riders either in one jurisdiction or in multiple jurisdictions. The following are the specific criteria used by the Regional Mobility Panel to classify bus routes.

- Inter-jurisdictional routes are defined as regional. Defining characteristics of inter-jurisdictional routes:
  - Cross a jurisdictional (independent city, county, state) boundary;
  - Penetrate at least two jurisdictions by more than one-half mile in each; and
  - Operate "open door" (allows boarding and alighting) over at least a portion of the line in two or more jurisdictions
- If a route does not qualify as regional under the inter-jurisdictional definition, then it must meet at least two of the following three criteria to be regional:
  - Arterial Streets: Operates for a considerable distance on an arterial street and a substantial portion (usually a majority) of riders use stops on the arterial street. Routes which operate for a short distance on an arterial incidental to their service area are not included
  - Regional Activity Center: Serves one or more regional activity centers. A conservative definition of regional activity centers is used, including only those where there is virtually universal agreement as to their regional character. Routes which feed Metrorail stations, but which do not directly serve any regional activity center, are not considered to be regional

- Cost Effectiveness: Annual boardings per annual platform hour greater than 30 applied consistently in all jurisdictions

Routes which do not meet the criteria described above are classified as non-regional. Regional and non-regional bus subsidy is allocated to the jurisdictions using the following formulas.

- **Regional Bus Subsidy Allocation.** The distribution of regional bus subsidy to the jurisdictions is based on a weighted, four-factor formula in the following proportions:

1. Density weighted population	25%
2. Revenue hours	25%
3. Revenue miles	35%
4. Average weekday ridership	15%

Density weighted population is determined by taking the urbanized area population distribution for the compact area (50 percent weighting) and combining it with the weighted population density (urbanized population divided by area). The formula prorates the urbanized population distribution by people per square mile.

The revenue hours factor is determined by taking the annual revenue hours assigned to each jurisdiction divided by the total regional revenue hours. The revenue miles factor is determined by taking total revenue miles assigned to each jurisdiction divided by the total regional revenue miles. Ridership is determined by taking the average weekday ridership (month of May sample) for each jurisdiction divided by the total average weekday ridership.

- **Non-Regional Bus Subsidy Allocation.** The distribution of non-regional bus subsidy to the jurisdictions is computed as follows:

1. Identify the costs of all Metrobus service, regional and non-regional
2. Identify the costs which would accrue for regional Metrobus service if no non-regional bus service were provided
3. Determine the costs of non-regional service by subtracting the regional Metrobus costs, as calculated in step two, from the costs of all Metrobus service
4. Divide the costs of non-regional service as computed in step three by total platform hours for non-regional service
5. Identify the non-regional platform hours for each jurisdiction
6. Multiply the platform hours for each jurisdiction by the hourly rate
7. Determine the revenue for each jurisdiction
8. Subtract from costs the revenue as determined in step seven

### **Formulas 3 and 4: Rail Maximum Fare and Base Subsidy Allocations**

The rail subsidy consists of two components: the maximum fare component and the base rail component. The total maximum fare subsidy is deducted from the total rail subsidy, and the result is allocated based on the base subsidy formula.

- **Maximum Fare Subsidy Allocation.** The maximum fare portion of the rail subsidy is designed to recognize the “taper” and “cap” features of the Metrorail fare structure. The taper feature is reflected in the diminishing cost per mile for trips greater than six miles, and the cap is reflected in the maximum fare on rail. The subsidy for the maximum fare is calculated as the difference between the regular fare that would have been paid if the taper and cap features were not available, and the actual fare paid with the taper and cap.

Once the maximum fare subsidy is calculated, the benefiting jurisdictions are allocated one-half the calculated amount, based on the percent of riders from the individual jurisdiction who benefit from the taper and cap. These percentages are calculated from the data taken from the Metrorail Passenger Survey. The remaining half of the maximum fare subsidy is incorporated into the rail base subsidy.

- **Rail Base Subsidy Allocation.** The base subsidy allocation for Metrorail service is based on three elements in equal proportions:
  1. Density weighted population 33.3%
  2. Number of rail stations 33.3%
  3. Average weekly ridership 33.3%

Density weighted population is determined by taking the urbanized area population distribution for the compact area (50 percent weighted) and combining that with the weighted population density (urbanized population divided by area). This calculation is the same for the regional bus subsidy allocation as it is for the rail base subsidy allocation. The rail stations factor is calculated by taking the number of stations, or portions of stations, assigned to each jurisdiction, divided by the total number of stations in the system. Ridership is calculated by taking the system average weekday ridership (month of May sample) times the jurisdictional ridership distribution, as determined by the rail passenger survey. Only persons who reside in the compact area are included in the distribution.

### Formula 5: Paratransit Subsidy Allocation

Paratransit subsidy is allocated to the jurisdictions using a two-factor formula with sub-allocations used for the Virginia jurisdictions.

1. Direct Costs - The contract carriers’ actual per trip, reservation and eligibility charges will be allocated directly to the jurisdictions
2. Overhead Costs - All other (non-direct) costs of the paratransit program will be allocated in proportion to the direct costs

Virginia sub-allocations of direct costs require that per trip charges be adjusted to reflect the average time of trips provided for each jurisdiction. Overhead costs assigned to Virginia jurisdictions will be sub-allocated based on the direct cost allocation as calculated above.

**Formula 6: Debt Service Allocation**

Planned debt service charges are allocated to the jurisdictions in the same proportion as each jurisdiction's current-year share of local match and system performance funding in the capital budget. The allocation of local match and system performance funding, in turn, is determined in accordance with the Capital Funding Agreement (CFA), which currently covers the period FY2011 to FY2016. For any planned new debt issuance shown in the CIP, allocated debt service is shown for all jurisdictions; however, if and when new debt is actually issued, jurisdictions are given the opportunity to "opt out" and provide their total principal contribution upfront to WMATA rather than participate in the debt issuance.

## **Appendix E: Debt Service**

### ***Debt Policy/Borrowing Powers***

Metro's Compact allows Metro to borrow money in pursuit of its mission. All such bonds and evidences of indebtedness are payable solely out of Metro's properties and revenues. The bonds and other obligations, except as may be otherwise provided in the indenture under which they were issued, are direct and general obligations of Authority and the full faith and credit of Metro are pledged for the prompt payment of the debt service.

Metro is required to make semi-annual payments of principal and interest on each series of bonds. There are certain covenants associated with these outstanding bonds with which Metro must comply. The most significant are:

- Punctually pay principal and interest according to provisions in the bond document.
- Except for certain instances, Metro cannot sell, mortgage, lease or otherwise dispose of transit system assets without filing a certification by the General Manager/Chief Executive Officer and Treasurer with the Trustee and Bond Insurers that such action will not impede or restrict the operation of the transit system.
- Metro must at all times maintain certain insurance or self-insurance covering the assets and operations of the transit system.

### ***Existing Gross Revenue Transit Bonds***

In October 2003, Metro issued \$163.5 million of Gross Revenue Transit Refunding Bonds, Series 2003, to refund the callable portion of Metro's outstanding Gross Revenue Transit Refunding Bonds, Series 1993. The final maturity for the 1993 bonds was in July 2010 and the final maturity for the 2003 bonds was July 2014.

In June 2009, Metro issued \$243.0 million of Gross Revenue Transit Bonds, Series 2009-A and \$55.0 million of Build America Bonds, Series 2009-B. Bond proceeds net of premiums/discounts totaled \$309.9 million. The bonds provide for semi-annual payments of interest and annual payments of principal, with final maturity in July 2034. The net annual jurisdictional debt service payment on the bonds is \$21.2 million, reflecting an annual credit of \$1.3 million for the Series B, Build America Bonds. Five jurisdictions opted out of the bond issuance and provided \$115.0 million in funding to bring total proceeds related to the bond issuance to \$425.0 million.

**Table E.1**

<b>Gross Revenue Transit Bonds</b> (FY2017 Jurisdiction Funding)			
	<u>Principal</u>	<u>Interest</u>	<u>Total Due</u>
<b>Gross Revenue Transit Bonds:</b>			
<b>Series 2009A</b>			
Due to Bondholders 1/1/2017	\$ -	\$ 4,992,472	\$ 4,992,472
Due to Bondholders 7/1/2017	8,690,000	4,992,472	13,682,472
<b>Total</b>	\$ 8,690,000	\$ 9,984,944	\$ 18,674,944
<b>Gross Revenue Transit Bonds:</b>			
<b>Series 2009B<sup>1</sup></b>			
Due to Bondholders 1/1/2017	\$ -	\$ 1,251,250	\$ 1,251,250
Due to Bondholders 7/1/2017	-	1,251,250	1,251,250
<b>Total</b>	\$ -	\$ 2,502,500	\$ 2,502,500

<sup>1</sup>Net of Build America Bond (BAB) credit

Metro previously maintained a \$330 million commercial paper program to provide funds for the Metro Matters Program. Payment of all maturing commercial paper was guaranteed by an irrevocable letter of credit. In June 2009, Metro retired the \$330.0 million commercial paper program. At the time of bond settlement commercial paper outstanding totaled \$314.5 million. All proceeds from the Series 2009-A Bond issuance and a portion of the proceeds from the jurisdiction opt out were utilized to retire the commercial paper. The balance of \$107.5 million from the jurisdiction opt out and Series 2009-B proceeds was used to finance the remaining work under the Metro Matters capital program. (See Table E-2 for schedule of debt service)

During FY2014, Metro increased the availability on its lines of credit from \$150 million to \$302.5 million. During the second quarter of FY2015, Metro issued a one-year Grant Anticipation Note (GAN) for \$200 million. During the fourth quarter of FY2015, Metro exercised an optional prepayment right and repaid \$100 million of the outstanding GAN balance. Additional optional prepayments were made during the first quarter of FY2016, with final maturity occurring in October 2015. The lines of credit and note support Metro's capital program. The lines of credit are also available to support operating cash flow needs.

Table E.2

Year Ending	Series 2009A Bonds			Series 2009B BABs				Aggregate
	Principal	Interest	Debt Service	Principal	Interest	BAB Credit	Debt Service	Debt Service
1/1/2010		\$ 6,950,487	\$ 6,950,487		\$ 2,160,278	\$ (756,097)	\$ 1,404,181	\$ 8,354,667
7/1/2010	5,375,000	6,193,503	11,568,503		1,925,000	(673,750)	1,251,250	12,819,753
1/1/2011		6,059,128	6,059,128		1,925,000	(673,750)	1,251,250	7,310,378
7/1/2011	6,555,000	6,059,128	12,614,128		1,925,000	(673,750)	1,251,250	13,865,378
1/1/2012		5,895,253	5,895,253		1,925,000	(673,750)	1,251,250	7,146,503
7/1/2012	6,885,000	5,895,253	12,780,253		1,925,000	(673,750)	1,251,250	14,031,503
1/1/2013		5,734,128	5,734,128		1,925,000	(673,750)	1,251,250	6,985,378
7/1/2013	7,205,000	5,734,128	12,939,128		1,925,000	(673,750)	1,251,250	14,190,378
1/1/2014		5,556,653	5,556,653		1,925,000	(673,750)	1,251,250	6,807,903
7/1/2014	7,560,000	5,556,653	13,116,653		1,925,000	(673,750)	1,251,250	14,367,903
1/1/2015		5,385,753	5,385,753		1,925,000	(673,750)	1,251,250	6,637,003
7/1/2015	7,900,000	5,385,753	13,285,753		1,925,000	(673,750)	1,251,250	14,537,003
1/1/2016		5,193,503	5,193,503		1,925,000	(673,750)	1,251,250	6,444,753
7/1/2016	8,285,000	5,193,503	13,478,503		1,925,000	(673,750)	1,251,250	14,729,753
* 1/1/2017		4,992,472	4,992,472		1,925,000	(673,750)	1,251,250	6,243,722
* 7/1/2017	8,690,000	4,992,472	13,682,472		1,925,000	(673,750)	1,251,250	14,933,722
1/1/2018		4,775,222	4,775,222		1,925,000	(673,750)	1,251,250	6,026,472
7/1/2018	9,125,000	4,775,222	13,900,222		1,925,000	(673,750)	1,251,250	15,151,472
1/1/2019		4,547,097	4,547,097		1,925,000	(673,750)	1,251,250	5,798,347
7/1/2019	9,580,000	4,547,097	14,127,097		1,925,000	(673,750)	1,251,250	15,378,347
1/1/2020		4,307,597	4,307,597		1,925,000	(673,750)	1,251,250	5,558,847
7/1/2020	10,060,000	4,307,597	14,367,597		1,925,000	(673,750)	1,251,250	15,618,847
1/1/2021		4,043,522	4,043,522		1,925,000	(673,750)	1,251,250	5,294,772
7/1/2021	10,585,000	4,043,522	14,628,522		1,925,000	(673,750)	1,251,250	15,879,772
1/1/2022		3,765,666	3,765,666		1,925,000	(673,750)	1,251,250	5,016,916
7/1/2022	11,140,000	3,765,666	14,905,666		1,925,000	(673,750)	1,251,250	16,156,916
1/1/2023		3,473,241	3,473,241		1,925,000	(673,750)	1,251,250	4,724,491
7/1/2023	11,725,000	3,473,241	15,198,241		1,925,000	(673,750)	1,251,250	16,449,491
1/1/2024		3,165,459	3,165,459		1,925,000	(673,750)	1,251,250	4,416,709
7/1/2024	12,340,000	3,165,459	15,505,459		1,925,000	(673,750)	1,251,250	16,756,709
1/1/2025		2,841,534	2,841,534		1,925,000	(673,750)	1,251,250	4,092,784
7/1/2025	12,990,000	2,841,534	15,831,534		1,925,000	(673,750)	1,251,250	17,082,784
1/1/2026		2,500,547	2,500,547		1,925,000	(673,750)	1,251,250	3,751,797
7/1/2026	13,670,000	2,500,547	16,170,547		1,925,000	(673,750)	1,251,250	17,421,797
1/1/2027		2,141,709	2,141,709		1,925,000	(673,750)	1,251,250	3,392,959
7/1/2027	14,390,000	2,141,709	16,531,709		1,925,000	(673,750)	1,251,250	17,782,959
1/1/2028		1,763,972	1,763,972		1,925,000	(673,750)	1,251,250	3,015,222
7/1/2028	15,145,000	1,763,972	16,908,972		1,925,000	(673,750)	1,251,250	18,160,222
1/1/2029		1,366,416	1,366,416		1,925,000	(673,750)	1,251,250	2,617,666
7/1/2029	15,940,000	1,366,416	17,306,416		1,925,000	(673,750)	1,251,250	18,557,666
1/1/2030		953,850	953,850		1,925,000	(673,750)	1,251,250	2,205,100
7/1/2030	16,765,000	953,850	17,718,850		1,925,000	(673,750)	1,251,250	18,970,100
1/1/2031		527,756	527,756		1,925,000	(673,750)	1,251,250	1,779,006
7/1/2031	17,620,000	527,756	18,147,756		1,925,000	(673,750)	1,251,250	19,399,006
1/1/2032		79,931	79,931		1,925,000	(673,750)	1,251,250	1,331,181
7/1/2032	3,145,000	79,931	3,224,931	15,370,000	1,925,000	(673,750)	16,621,250	19,846,181
1/1/2033					1,387,050	(485,468)	901,583	901,583
7/1/2033				19,375,000	1,387,050	(485,468)	20,276,583	20,276,583
1/1/2034					708,925	(248,124)	460,801	460,801
7/1/2034				20,255,000	708,925	(248,124)	20,715,801	20,715,801
Total	\$242,675,000	\$171,284,809	\$413,959,809	\$ 55,000,000	\$ 92,977,228	\$(32,542,030)	\$115,435,198	\$529,395,007

\* FY2017 Jurisdiction subsidy requirements include funds for debt service payments due on 1/1/2017 and 7/1/2017.



***New Capital Bonds***

The Capital Improvement Program (CIP) is a six-year program. To support the CIP, long-term borrowing may be required, and this borrowing is anticipated to commence in FY2016.

Table E.3 provides a summary of Metro's estimated jurisdictional share of debt and Table E.4 provides detail of Metro's proposed debt issuances and jurisdictional allocations. The amounts represented in these tables are subject to change based on financial market conditions and jurisdictional decisions to opt for additional cash contributions in lieu of debt issuance.

**Table E.3**

	<b>Par Value</b>	<b>Issuance Cost</b>	<b>Total</b>
<b><i>District of Columbia</i></b>	437,937,160	3,526,539	441,463,699
<b>Total District of Columbia</b>	<b>437,937,160</b>	<b>3,526,539</b>	<b>441,463,699</b>
<b><i>Maryland</i></b>			
Montgomery County	200,907,513	1,617,340	202,524,853
Prince Georges County	208,687,474	1,680,338	210,367,812
<b>Total Maryland</b>	<b>409,594,987</b>	<b>3,297,678</b>	<b>412,892,665</b>
<b><i>Virginia</i></b>			
Alexandria	52,852,094	426,103	53,278,197
Arlington County	98,356,531	791,634	99,148,165
City of Fairfax	3,031,953	24,224	3,056,177
Fairfax County	172,798,024	1,390,976	174,189,000
Falls Church	3,729,251	30,096	3,759,347
<b>Total Virginia</b>	<b>330,767,853</b>	<b>2,663,033</b>	<b>333,430,886</b>
<b>Total Debt</b>	<b>1,178,300,000</b>	<b>9,487,250</b>	<b>1,187,787,250</b>

Table E.4

**Projected Jurisdictional Share of Debt  
Proposed FY2017 - FY2022 Capital Plan**

**Debt Repayment**

	Total Debt Service		District of Columbia		Montgomery County		Prince Georges County		Alexandria		Arlington County		City of Fairfax		Fairfax County		Falls Church	
	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest
FY2017 Debt Service	32,782,928	42,601,969	12,184,398	15,833,831	5,589,686	7,263,891	5,806,152	7,545,192	1,470,478	1,910,911	2,736,489	3,556,114	84,350	109,615	4,807,616	6,247,579	103,758	134,835
FY2018 Debt Service	33,750,785	41,426,155	12,544,121	15,396,818	5,754,711	7,063,408	5,977,568	7,336,945	1,513,891	1,898,170	2,817,279	3,457,965	86,841	106,589	4,949,553	6,075,146	106,821	131,114
FY2019 Debt Service	34,747,216	40,215,627	12,914,463	14,946,902	5,924,609	6,857,006	6,154,045	7,122,549	1,538,586	1,803,872	2,900,454	3,352,919	89,405	103,475	5,095,679	5,897,622	109,975	127,282
FY2020 Debt Service	35,773,065	38,969,360	13,295,739	14,483,703	6,099,522	6,684,510	6,335,732	6,901,824	1,604,601	1,747,971	2,986,085	3,252,889	92,044	100,268	5,246,120	5,714,857	113,222	123,338
FY2021 Debt Service	36,829,201	37,686,299	13,688,272	14,006,829	6,279,600	6,425,740	6,522,783	6,674,583	1,651,974	1,690,419	3,072,244	3,145,788	94,762	96,367	5,401,002	5,526,696	116,564	119,277
<b>Total FY2017-22 Debt Service</b>	<b>173,883,195</b>	<b>200,899,411</b>	<b>64,626,993</b>	<b>74,668,083</b>	<b>29,648,128</b>	<b>34,254,555</b>	<b>30,796,279</b>	<b>35,581,094</b>	<b>7,799,531</b>	<b>9,011,343</b>	<b>14,514,552</b>	<b>16,769,677</b>	<b>447,401</b>	<b>516,914</b>	<b>25,499,971</b>	<b>29,461,899</b>	<b>550,340</b>	<b>635,847</b>
FY2023 Debt Service	37,916,517	36,365,359	14,092,394	13,515,877	6,464,994	6,200,512	6,715,356	6,440,632	1,700,745	1,631,168	3,165,005	3,035,526	97,559	93,568	5,560,457	5,332,980	120,006	115,096
FY2024 Debt Service	39,035,934	35,005,420	14,508,446	13,010,429	6,655,861	5,968,634	6,913,615	6,199,775	1,750,957	1,570,168	3,258,446	2,922,007	100,439	90,069	5,724,620	5,133,545	123,549	110,792
FY2025 Debt Service	40,188,399	33,605,331	14,936,782	11,950,060	6,852,363	5,729,911	7,117,727	5,951,807	1,802,651	1,507,367	3,354,646	2,805,138	103,405	86,467	5,893,629	4,928,222	127,196	106,361
FY2026 Debt Service	41,374,889	32,163,907	15,377,764	11,494,327	7,054,667	5,484,139	7,327,865	5,696,517	1,855,871	1,442,712	3,453,686	2,684,818	106,458	82,739	6,067,628	4,716,837	130,952	101,799
FY2027 Debt Service	42,596,409	30,679,928	15,831,765	11,402,778	7,262,943	5,231,112	7,544,207	5,433,691	1,910,662	1,376,148	3,555,650	2,560,946	109,601	78,939	6,246,763	4,499,211	134,818	97,102
FY2028 Debt Service	43,853,991	29,152,136	16,299,169	10,834,945	7,477,369	4,970,614	7,766,936	5,163,106	1,967,071	1,307,619	3,660,624	2,433,416	112,836	75,008	6,431,888	4,275,161	138,798	92,267
FY2029 Debt Service	45,148,701	27,579,240	16,780,373	10,250,349	7,698,124	4,702,426	7,996,241	4,884,532	2,025,145	1,237,067	3,768,698	2,302,122	116,168	70,961	6,621,057	4,044,496	142,896	87,288
FY2030 Debt Service	46,481,635	25,959,907	17,275,783	9,648,492	7,925,388	4,426,320	8,232,316	4,597,733	2,084,934	1,164,432	3,894,962	2,166,951	119,597	66,795	6,816,532	3,807,020	147,114	82,163
FY2031 Debt Service	47,853,922	24,292,765	17,785,819	9,028,668	8,159,381	4,142,062	8,475,360	4,302,467	2,146,488	1,089,652	4,094,510	2,027,790	123,128	62,505	7,017,778	3,562,534	151,458	76,887
FY2032 Debt Service	49,266,723	22,576,405	18,310,914	8,390,950	8,400,272	3,849,412	8,725,580	3,998,484	2,209,859	1,012,665	4,312,441	1,884,520	126,763	58,089	7,224,965	3,310,830	155,929	71,454
FY2033 Debt Service	50,721,234	20,809,371	18,851,510	7,734,198	8,648,275	3,548,123	8,983,187	3,685,527	2,275,101	933,404	4,533,854	1,737,021	130,506	53,543	7,438,269	3,051,694	160,533	65,862
FY2034 Debt Service	52,218,687	18,990,170	19,408,067	7,058,057	8,903,600	3,237,938	9,246,399	3,363,330	2,342,269	851,804	4,768,850	1,585,166	134,359	48,862	7,657,870	2,784,908	165,272	60,104
FY2035 Debt Service	53,760,350	17,117,260	19,981,056	6,361,955	9,166,462	2,918,595	9,521,442	3,031,621	2,411,421	767,795	4,987,538	1,428,829	138,325	44,043	7,883,955	2,510,246	170,152	54,176
FY2036 Debt Service	55,347,528	15,189,055	20,570,960	5,645,301	9,437,086	2,589,825	9,802,545	2,690,118	2,482,613	681,305	5,262,024	1,267,876	142,409	39,081	8,116,715	2,227,475	175,175	48,073
FY2037 Debt Service	56,981,564	13,203,924	21,178,281	4,907,489	9,715,699	2,251,348	10,091,948	2,338,534	2,555,908	592,262	5,554,422	1,102,171	146,614	33,974	8,356,346	1,936,355	180,347	41,790
FY2038 Debt Service	58,663,842	11,160,185	21,803,532	4,147,895	10,002,537	1,902,878	10,389,894	1,976,569	2,631,367	500,590	5,806,847	931,574	150,942	28,715	8,603,052	1,636,641	185,671	35,322
FY2039 Debt Service	60,395,786	9,066,108	22,447,242	3,365,875	10,297,844	1,594,121	10,696,637	1,603,918	2,709,053	406,212	6,041,417	755,941	153,398	23,301	8,857,042	1,328,078	191,513	28,663
FY2040 Debt Service	62,178,863	6,889,913	23,109,956	2,560,767	10,601,869	1,174,771	11,012,436	1,220,266	2,789,033	309,047	6,190,256	575,122	159,988	17,728	9,118,530	1,010,406	196,796	21,807
FY2041 Debt Service	64,014,582	4,669,764	23,792,236	1,731,890	10,914,870	794,518	11,337,559	825,286	2,871,374	209,014	6,343,489	388,965	164,710	11,990	9,387,739	683,354	202,606	14,748
FY2042 Debt Service	65,904,498	2,363,775	24,494,659	878,542	11,237,112	403,038	11,672,280	418,646	2,956,146	106,027	6,501,246	197,311	169,572	6,082	9,654,895	346,648	208,588	7,481
<b>Total FY2023-42 Debt Service</b>	<b>1,013,904,055</b>	<b>416,819,921</b>	<b>376,836,706</b>	<b>154,919,043</b>	<b>172,876,715</b>	<b>71,070,298</b>	<b>179,517,533</b>	<b>73,822,559</b>	<b>45,478,666</b>	<b>18,696,458</b>	<b>84,633,613</b>	<b>34,793,209</b>	<b>2,608,775</b>	<b>1,072,478</b>	<b>148,689,080</b>	<b>61,126,641</b>	<b>3,209,006</b>	<b>1,319,285</b>
<b>Total Debt Service</b>	<b>1,187,787,250</b>	<b>617,719,332</b>	<b>441,463,699</b>	<b>229,527,126</b>	<b>202,524,853</b>	<b>106,324,852</b>	<b>210,367,812</b>	<b>109,403,653</b>	<b>53,278,197</b>	<b>27,707,801</b>	<b>51,562,886</b>	<b>51,848,165</b>	<b>3,056,177</b>	<b>1,589,392</b>	<b>174,189,000</b>	<b>90,588,540</b>	<b>3,759,347</b>	<b>1,955,082</b>

## Appendix F Operating Statistics

### Metrobus Revenue Vehicle Fleet Management Plan

The Metrobus Revenue Vehicle Fleet Management Plan is a statement of the processes and practices by which Metro establishes its current and projected Metrobus revenue vehicle fleet size requirements and operating spare ratio. It includes a description of revenue service planned to accommodate growth in Metrobus ridership, as well as an assessment and projection of needs for bus vehicle maintenance. The information that follows reflects the most current data from the Federal Transit Administration Approved Plan.

<b>Metrobus Statistics: FY2014 - FY2017</b>				
	<b>FY2014</b>	<b>FY2015</b>	<b>FY2016</b>	<b>FY2017</b>
	<b>Actual</b>	<b>Actual</b>	<b>Approved</b>	<b>Proposed</b>
<b>STATISTICS:</b>				
Total Bus Miles (000s)	50,019	51,075	51,424	50,594
Revenue (budget) Bus Miles (000s)	39,159	40,451	38,877	38,407
Total Passengers (000s)	134,408	139,124	140,794	135,573
Bus Fleet Size (Year End)	1,481	1,507	1,507	1,548
Total Passenger Revenue (\$000s)	\$149,825	\$155,171	\$156,835	\$158,345
Total Operating Revenue (000s)	\$165,022	\$176,123	\$181,335	\$177,124
Total Operating Expenses (000s)	\$569,006	\$582,399	\$634,314	\$656,780
Gross Subsidy (000s)	\$403,984	\$406,276	\$452,979	\$479,656
Net Subsidy (000s)	\$393,547	\$395,838	\$442,540	\$479,655
<b>RATIOS:</b>				
Cost Per Total Bus Mile	11.38	11.40	12.33	12.98
Passengers Per Bus	90.75	92.32	93.43	87.58
Passengers Per Scheduled Bus Mile	3.43	3.44	3.62	3.53
Cost Per Passenger	\$4.23	\$4.19	\$4.51	\$4.84
Net Subsidy Per Passenger	\$2.93	\$2.85	\$3.14	\$3.54
Average Passenger Fare *	\$1.11	\$1.12	\$1.11	\$1.17
Percentage of Operating Cost				
Recovered from Passenger Revenues	26.3%	26.6%	24.7%	24.1%
Percentage of Operating Cost				
Recovered from all Operating Revenues	29.0%	30.2%	28.6%	27.0%
* Average is lower than base fare due to transfers and 7-day pass impact.				

Active Bus Fleet: FY2017		
	MAXIMUM SCHEDULED FLEET	TOTAL ACTIVE FLEET
Fiscal 2013 End of Year	1,284	1,506
Fiscal 2014 End of Year *	1,290	1,514
Fiscal 2015 End of Year **	1,294	1,526
Fiscal 2016 End of Year **	1,305	1,537
Fiscal 2017 End of Year **	1,296	1,548
* Includes 27 strategic buses in accordance with fleet plan		
** Includes 35 strategic buses in accordance with fleet plan		

Average Age of Bus Fleet at End of FY2017			
MANUFACTURER	YEAR ENTERED SERVICE	NUMBER OF BUSES	AVERAGE AGE
ORION V	2000	6	17
ORION VII - CNG	2005	250	12
HYBRID ELECTRIC	2006	50	11
CLEAN DIESEL	2006	116	11
NEW FLYER - CNG	2007	25	10
NABI	2008	22	9
NEW FLYER - HYBRID	2008	103	9
NEW FLYER - HYBRID	2009	99	8
NEW FLYER - HYBRID	2010	147	7
NEW FLYER - XCELSIOR	2011	100	6
NEW FLYER - XCELSIOR	2012	67	5
ORION VII - HYBRID	2012	25	5
ORION VII - CLEAN DIESEL	2012	27	5
NEW FLYER - XCELSIOR	2013	105	4
FORD	2013	6	4
NABI - BRT	2014	105	3
NEW FLYER XCELSIOR HYBRID	2015	21	2
NEW FLYER XCELSIOR HYBRID	2015	56	2
NEW FLYER XCELSIOR CNG	2015	164	2
NEW FLYER XCELSIOR HYBRID	2016	54	1
<b>TOTAL**</b>		<b>1,548</b>	<b>6.86</b>
* Includes 27 strategic buses in accordance with fleet plan.			
** Includes 35 strategic buses in accordance with fleet plan.			

Bus Fleet Size by Garage: FY 2017				
Garage	Fiscal 2017 Maximum		Total Fleet	Spare Ratio
	Scheduled Fleet			
Bladensburg	213		262	15.7%
Shepherd Parkway	183		241	14.4%
Northern	125		153	15.4%
Western	101		118	13.7%
Southern Avenue	65		78	15.2%
Four Mile Run	184		222	15.3%
Landover	141		169	16.0%
Montgomery	173		209	15.7%
West Ox	82		96	15.7%
<b>SYSTEM TOTAL</b>	<b>1,267</b>		<b>1,548</b>	<b>15.4%</b>

\* Maximum scheduled fleet Includes 29 strategic buses

Comparison of Bus Miles Operated: FY2013- FY2017				
	FY2014	FY2015	FY2016	FY2017
	Approved	Approved	Approved	Proposed
<b>Total Scheduled</b>	<b>47,968,460</b>	<b>49,740,260</b>	<b>50,080,598</b>	<b>49,278,234</b>
Strategic	-	-		
Bus Bridges	-	600,000	600,000	600,000
Special Service	100,000	100,000	100,000	100,000
Change-Offs	267,522	277,403	281,025	268,829
Yard Work	449,553	466,158	472,245	451,419
Missed Trips	(104,205)	(108,088)	(109,499)	(104,669)
<b>Total Unscheduled</b>	<b>712,869</b>	<b>1,335,473</b>	<b>1,343,772</b>	<b>1,315,579</b>
<b>TOTAL MILES</b>	<b>48,681,329</b>	<b>51,075,733</b>	<b>51,424,370</b>	<b>50,593,813</b>
Estimated miles of articulated bus included in above	1,900,948	1,900,948	1,900,948	1,900,948

Strategic mileage included in Scheduled Miles.  
The reduction in articulated miles is a result of extended headways on the 70 Line.

## Bus Operator Payhours: FY2017

FY2017 Bus Operator Wages			
Category	Payhours	Average Hourly Rate	Budget
Scheduled (straight + OT)*	5,408,860	\$27.21	\$147,175,077
<b>Subtotal:</b>	<b>5,408,860</b>		<b>\$147,175,077</b>
Non-Scheduled OT/Special Event	246,722	\$27.21	\$6,713,306
Standing Extra	47,555	\$27.21	\$1,293,972
Utility	62,144	\$27.21	\$1,690,938
Training	269,621	\$18.12	\$4,886,027
Miscellaneous	179,252	\$27.21	\$4,877,447
Guarantees	52,024	\$27.21	\$1,415,573
Funeral Leave	5,901	\$27.21	\$160,566
Jury Duty	5,256	\$27.21	\$143,016
Vacation	355,640	\$27.21	\$9,676,964
Sick	311,100	\$27.21	\$8,465,031
Holiday	230,332	\$27.21	\$6,267,334
<b>Subtotal:</b>	<b>1,765,547</b>		<b>\$45,590,174</b>
<b>Grand Total:</b>	<b>7,174,407</b>	<b>\$26.87</b>	<b>\$192,765,250</b>

\* Pay hours for strategic buses are included in the FY17 Scheduled Pay Hours.  
Non-Scheduled OT includes funding for bus bridges, supporting Rail shutdowns, elevator shuttles.

**Metrobus Route Summary: FY2017**

	<b>ANNUAL PLATFORM HOURS</b>							
	<b>TOTAL</b>	<b>TOTAL</b>	<b>TOTAL</b>	<b>TOTAL</b>	<b>TOTAL</b>	<b>TOTAL</b>	<b>TOTAL</b>	<b>TOTAL</b>
	<b>SERVICE</b>	<b>SERVICE</b>	<b>SERVICE</b>	<b>SERVICE</b>	<b>SERVICE</b>	<b>SERVICE</b>	<b>SERVICE</b>	<b>SERVICE</b>
	<b>FY2010</b>	<b>FY2011</b>	<b>FY2012</b>	<b>FY2013*</b>	<b>FY2014*</b>	<b>FY2015*</b>	<b>FY2016</b>	<b>FY2017</b>
<b>Regional Routes</b>								
District of Columbia	1,615,035	1,616,829	1,637,513	1,701,790	1,691,338	1,755,539	1,783,989	1,756,066
Maryland	828,831	830,288	822,385	874,355	868,570	886,898	893,716	892,750
Virginia	731,804	738,549	743,905	798,923	800,416	823,206	830,318	837,830
<b>Totals for Regional:</b>	<b>3,175,671</b>	<b>3,185,666</b>	<b>3,203,803</b>	<b>3,375,069</b>	<b>3,360,324</b>	<b>3,465,643</b>	<b>3,508,023</b>	<b>3,486,645</b>
<b>Non-Regional Routes</b>								
District of Columbia	417,155	415,015	396,675	394,654	380,811	381,898	368,793	368,025
Maryland	384,846	385,773	387,451	391,759	379,565	379,118	387,432	387,121
Virginia	104,746	104,476	103,320	117,305	111,991	129,831	132,187	132,237
<b>Totals for Non-Regional:</b>	<b>906,747</b>	<b>905,264</b>	<b>887,446</b>	<b>903,718</b>	<b>872,367</b>	<b>890,847</b>	<b>888,413</b>	<b>887,383</b>
<b>Reimbursable Routes</b>								
District of Columbia	-	-	-	-	-	-	-	-
Maryland	-	-	-	-	-	-	-	-
Virginia	-	-	-	-	-	-	-	-
<b>Totals for Reimbursable:</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>TOTAL METROBUS ROUTES</b>	<b>4,082,418</b>	<b>4,090,930</b>	<b>4,091,249</b>	<b>4,278,787</b>	<b>4,232,691</b>	<b>4,356,490</b>	<b>4,396,435</b>	<b>4,396,435</b>
<b>OPERATOR SHUTTLES/STRATEGIC BUSES/HEADWAY MANAGEMENT</b>					107,651	175,549	118,566	111,647

\* Reflects adjusted numbers

**Regional and Non-Regional Metrobus Routes**

Metrobus routes are designated as either regional or non-regional. The cost of providing Metrobus service on regional routes is allocated to all of the Metro contributing jurisdictions. Costs associated with non-regional are allocated to a greater degree to the jurisdiction receiving the benefit of the non-regional route.

The Metro Board of Directors approves the designation of regional or non-regional Metrobus routes. The factors used in making the determination of regional and non-regional routes are:

- alignment of inter-jurisdictional routes
- routes operating on arterial streets
- routes that serve specific regional activity centers and
- route cost effectiveness

Metrobus operating costs can be expressed in terms of cost per platform hour. Platform hours include both revenue and non-revenue (sometimes called “deadhead”) service, and this measure captures the total time between a bus leaving its storage and maintenance facility and its return at the end of the day. For the FY2016 budget, the average cost per platform hour for all routes is \$144.89. For the allocation of the FY2016 operating subsidy, the budgeted cost per platform hour for non-regional routes (which has certain overhead and administrative expenses removed) is \$115.73.

The following tables show the Metrobus regional and non-regional routes by major jurisdiction.

<b>Metrobus Regional and Non-Regional Route Summary</b>											
<b>DC REGIONAL ROUTES - PLATFORM HOURS</b>											
<u>Line #</u>	<u>Line Name</u>	<u>Routes</u>	<u>Sched Days</u>	<u>FY2010</u>	<u>FY2011</u>	<u>FY2012</u>	<u>FY2013*</u>	<u>FY2014*</u>	<u>FY2015*</u>	<u>FY2016</u>	<u>FY2017</u>
<b>113</b>	<b>Friendship Heights - Southeast</b>	30N,30S	W,Sa,Su			0	0	0	45,539	53,612	53,439
99	Wisconsin Avenue	31,33	W,Sa,Su	29,608	29,616	29,544	30,665	29,480	54,557	59,111	58,799
93	Pennsylvania Avenue	32,34,36	W,Sa,Su	112,534	112,449	112,688	117,081	116,722	89,936	86,020	87,972
58	Naylor Road	34	W,Sa,Su	21,979	22,002	21,958	25,237	25,134	3,757	0	0
100	Wisconsin Avenue Limited	37	W (Sat Hol)	6,413	6,503	6,401	9,557	9,287	11,100	11,134	11,090
42	Pennsylvania Avenue Limited	39	W (Sat Hol)	8,245	8,415	8,283	11,223	10,743	10,700	11,075	11,031
81	Mount Pleasant	42,43	W,Sa,Su	64,897	63,575	63,396	62,404	61,160	61,157	61,473	61,334
52	14th Street	52,53,54	W,Sa,Su	97,970	98,990	99,294	103,195	100,479	101,678	102,571	102,506
43	Fort Totten-Petworth	60,64	W,Sa,Su	41,474	41,503	42,299	42,611	40,743	40,757	40,885	40,797
59	Takoma-Petworth	62,63	W,Sa,Su	31,086	31,048	31,535	31,564	32,316	32,305	32,411	32,209
50	Petworth-11th St	66,68	W,Sa,Su	0	0	0	0	0	0	0	0
118	Georgia Avenue-7th Street	70	W,Sa,Su	0	0	0	76,914	74,017	79,991	80,939	80,925
118	Georgia Avenue-7th Street	70,71	W,Sa,Su	88,060	88,202	88,310	0	0	0	0	0
119	Convention Center- S.W. Waterfr	74	W,Sa,Su	0	0	0	24,609	23,620	23,620	20,125	20,064
107	Georgia Avenue Limited	79	W (Sat Hol)	24,274	25,516	37,181	40,219	47,661	48,900	48,741	48,593
86	North Capitol Street	80	W,Sa,Su	60,743	60,768	60,447	62,707	61,285	62,822	63,038	62,829
130	U Street-Garfield	90,92,93	W,Sa,Su	108,182	107,115	106,788	111,925	110,825	112,344	117,549	117,138
141	Stanton Road	94	W,Sa,Su	11,614	11,634	11,562	11,952	12,424	13,151	11,561	11,502
18	East Capitol Street-Cardozo	96,97	W,Sa,Su	60,464	60,147	59,962	61,563	62,250	62,552	62,694	62,325
581	Anacostia-Congress Heights	A2,6,7,8,42	W,Sa,Su	79,686	79,720	79,526	82,643	79,472	79,656	80,014	79,928
582	Anacostia-Fort Drum	A4,W5	W,Sa,Su	25,168	25,278	25,212	25,517	35,008	36,009	36,192	36,295
111	M.L. King Jr. Avenue Limited Line	A9	W (Sat Hol)	6,460	6,477	6,359	7,768	9,596	9,509	9,584	9,546
150	Bladensburg Road-Anacostia	B2	W,Sa,Su	55,847	55,539	55,324	61,553	59,615	59,931	60,333	60,127
22	Glover Park-Federal Triangle	D1	W (Sat Hol)	0	5,049	4,978	5,719	5,898	5,938	5,886	5,856
55	Sibley Hospital - Stadium-Armory	D1,3,6	W,Sa,Su	67,413	55,492	55,317	0	0	0	0	0
48	Ivy City-Dupont Circle	D3	W (Sat Hol)	0	6,426	6,317	6,048	5,822	5,664	5,539	5,497
37	MacArthur Boulevard-Georgetown	D5	W (Sat Hol)	3,817	4,284	4,192	4,514	4,782	4,780	4,596	4,578
55	Sibley Hospital - Stadium-Armory	D6	W,Sa,Su	0	0	0	57,880	55,737	56,050	56,510	56,404
77	Military Road-Crosstown	E2,3,4	W,Sa,Su	48,968	48,834	48,658	50,472	48,559	48,628	0	0
<b>79</b>	<b>Ivy City - Fort Totten</b>	E2	W,Sa,Su							13,621	13,825
<b>77</b>	<b>Military Road-Crosstown</b>	E4 (E3 Elim	W,Sa,Su							37,298	37,087
89	P Street-LeDroit Park	G2	W,Sa,Su	26,434	26,432	24,125	25,711	25,631	25,716	25,874	25,653
101	Rhode Island Avenue	G8	W,Sa,Su	34,477	32,588	34,653	39,574	37,858	37,821	37,945	37,744
62	Brookland-Potomac Park	H1	W (Sat Hol)	4,913	4,922	4,836	5,258	5,680	5,690	5,388	5,368
35	Crosstown	H2,3,4	W,Sa,Su	55,726	55,744	55,387	58,346	56,068	56,024	54,577	54,406
32	Connecticut Avenue	L1,2	W,Sa,Su	43,479	43,507	46,115	43,360	41,276	40,484	40,621	40,483
75	Massachusetts Avenue	N2,3,4,6	W,Sa,Su	44,353	44,597	43,676	43,505	41,577	41,535	40,296	40,158
98	Navy Yard Shuttle	N22	W	0	0	0	0	0	0	0	0
109	16th Street-Potomac Park	S1	W (Sat Hol)	12,261	12,215	12,031	12,613	12,278	12,293	13,711	13,696
108	16th Street	S2,4	W,Sa,Su	110,630	110,187	109,954	112,351	109,308	109,843	110,749	110,020
112	16th Street Limited	S9	W (Sat Hol)	18,692	19,049	18,720	23,391	24,757	24,760	25,722	25,202
134	Minnesota Avenue-Anacostia	U2	W, Sa	11,934	11,960	11,747	13,962	13,332	13,987	0	0
134	<b>Deanwood-Minnesota Ave</b>	U7	W,Sa,Su							10,216	10,142
132	Benning Heights- M Street	V1	W							8,047	8,015
133	Capitol Heights-Minnesota Avenue	V2,4	W,Sa,Su							55,105	55,467
57	Fairfax Village-L'Enfant Plaza	V5	W (Sat Hol)	5,474	5,483	5,388	5,455	5,212	4,448	4,466	4,449
114	Minnesota Avenue-M Street	V7,8,9	W,Sa,Su	44,752	43,206	43,240	48,717	48,089	43,429	0	0
95	Deanwood-Alabama Avenue	W4	W,Sa,Su	43,244	46,358	46,138	48,630	52,058	54,392	54,777	54,704
587	South Capitol St. Limited	W9	W	0	0	0	0	3,149	4,060	3,973	3,958
151	Benning Road	X1,3	W (Sat Hol)	10,829	10,863	10,776	11,819	11,631	11,862	11,884	12,013
14	Benning Road-H Street	X2	W,Sa,Su	69,759	71,090	69,969	71,975	69,541	72,808	72,123	71,634
11	Benning Road-H St Express	X9	W	0	0	11,257	11,585	11,257	11,257	11,302	11,257
<b>SUBTOTAL Regional DC</b>				<b>1,615,036</b>	<b>1,616,829</b>	<b>1,637,513</b>	<b>1,701,790</b>	<b>1,691,338</b>	<b>1,731,440</b>	<b>1,759,290</b>	<b>1,756,066</b>

\* Reflects adjusted numbers



<b>Metrobus Regional and Non-Regional Route Summary</b>											
<b>DC NON-REGIONAL ROUTES - PLATFORM HOURS</b>											
<b>Line #</b>	<b>Line Name</b>	<b>Routes</b>	<b>Sched Days</b>	<b>FY2010</b>	<b>FY2011</b>	<b>FY2012</b>	<b>FY2013*</b>	<b>FY2014*</b>	<b>FY2015*</b>	<b>FY2016</b>	<b>FY2017</b>
107	Georgia Avenue Metro Extra	79	W	12,505	12,505	0	0	0	0	0	0
23	Woodley Park- U Steet Loop	98	W,Sa,Su	0	0	0	0	0	0	0	0
49	Fort Lincoln Shuttle	B8,9	W (Sat Hol)	6,350	6,350	6,250	6,432	6,250	5,217	5,237	5,217
51	Glover Park-Dupont Circle	D2	W,Sa,Su	18,473	18,489	18,424	19,015	18,282	18,280	18,335	18,282
56	Ivy City-Franklin Square	D4	W,Sa,Su	16,452	18,420	18,408	19,169	18,404	18,406	18,462	18,407
45	Hospital Center	D8	W,Sa,Su	43,923	42,706	41,642	42,019	40,443	40,483	40,559	40,409
71	Chevy Chase	E6	W (Sat Hol)	5,920	5,916	5,827	5,997	5,827	5,827	5,851	5,827
34	Brookland-Fort Lincoln	H6	W,Sa,Su	18,970	19,009	19,430	20,124	19,336	19,336	19,397	19,336
91	Park Road-Brookland	H8,9	W,Sa,Su	33,113	33,013	32,817	32,881	31,734	31,528	32,499	32,401
551	Takoma-Walter Reed	K1	W (Sat Hol)	3,825	3,825	3,765	0	0	0	0	0
583	Takoma-Fort Totten	K2	W (Sat Hol)	4,352	4,361	4,143	4,170	4,813	4,824	4,844	4,821
64	Fairfax Village-Naylor Road	M2	W (Sat Hol)	1,879	1,887	1,849	1,903	1,849	0	0	0
84	Nebraska Avenue	M4	W (Sat Hol)	10,799	10,659	10,492	10,726	10,436	10,498	10,322	10,380
46	Fairfax Village	M6	W,Sa,Su	14,483	14,505	14,465	15,434	14,936	14,900	14,941	14,895
82	Congress Heights Shuttle	M8,9	W (Sat Hol)	7,863	7,854	7,739	8,007	7,798	0	0	0
79	Tenleytown-Glover Park	N8	W (Sat Hol)	10,502	10,506	4,728	0	0	0	0	0
544	Anacostia-Eckington	P6	W,Sa,Su	43,851	43,933	43,941	45,040	43,256	43,105	43,417	43,285
78	Sheriff Road-River Terrace	U4	W,Sa,Su	12,594	12,523	12,463	12,549	11,997	12,150	12,261	12,223
135	Mayfair-Marshall Heights	U5,6	W,Sa,Su	29,661	29,717	29,652	29,832	28,827	28,875	29,394	29,315
44	Capitol Heights-Benning Heights	U8	W,Sa,Su	36,519	36,547	35,708	36,555	34,955	34,953	19,593	19,406
82	Shipley Terrace-Ft. Drum	W1	W					0	0	12,254	12,203
158	United Medical Center-Anacostia	W2,3	W,Sa,Su	37,890	37,921	37,889	38,909	37,366	12,205	37,735	37,631
15	Garfield-Anacostia Loop	W6,8	W,Sa,Su	29,670	29,586	29,559	30,462	29,346	37,500	28,594	28,517
587	L'Enfant-Coast Guard	W9	W	-	-	-	-	0	28,310	0	0
25	Maryland Avenue	X8	W,Sa,Su	8,701	8,685	8,699	9,061	8,720	8,767	8,795	8,767
	Subtotal Schools	-----	W	8,862	6,098	8,785	6,368	6,237	6,733	6,302	6,704
<b>SUBTOTAL Non-Regional DC</b>				<b>417,155</b>	<b>415,015</b>	<b>396,675</b>	<b>394,654</b>	<b>380,811</b>	<b>381,898</b>	<b>368,793</b>	<b>368,025</b>

**Metrobus Regional and Non-Regional Route Summary****MD REGIONAL ROUTES - PLATFORM HOURS**

Line #	Line Name	Routes	Sched Days	FY2010	FY2011	FY2012	FY2013*	FY2014*	FY2015*	FY2016	FY2017
74	College Park	81,82,83,86	W,Sa,Su	48,038	48,053	47,781	49,880	48,312	48,331	49,540	49,380
542	Rhode Island Avenue-New Carrollton	84	W,Sa,Su	17,228	17,246	16,944	17,593	16,992	17,104	0	0
90	Martin Luther King Jr. Highway	A11,12	W,Sa,Su	33,803	33,931	33,760	35,032	33,691	35,392	35,746	35,264
13	Greenbelt-Twinbrook	C2,4	W,Sa,Su	99,603	99,753	90,553	94,211	94,462	94,726	95,178	95,204
642	Greenbelt-Glenmont	C7,9	W	0	0	0	0	0	0	0	0
103	College Park-White Flint	C8	W,Sa	26,241	26,327	26,269	28,253	27,091	27,087	27,184	27,093
29	Clinton	C11,13	W (Sat Hol)	5,015	5,024	5,003	5,149	5,003	5,066	5,056	5,112
63	Hillcrest Heights	C12,14	W,Sa	10,183	10,202	10,237	10,926	10,600	10,600	10,640	10,600
584	Oxon Hill-Suitland	D12,13,14	W,Sa,Su	46,953	47,037	47,022	54,802	52,846	53,462	54,458	54,346
28	Chillum Road	F1,2	W,Sa,Su	20,536	20,556	20,433	21,184	20,417	20,429	20,493	20,426
97	New Carrollton-Silver Spring	F4	W,Sa,Su	0	0	0	49,324	48,622	50,063	49,402	49,246
97	New Carrollton-Silver Spring	F4,6	W,Sa,Su	53,833	54,286	54,022	0	0	0	0	0
98	New Carrollton-Fort Totten	F6	W	0	0	0	16,541	17,761	17,909	18,000	17,926
73	Marlow Heights-Temple Hills	H11,12,13	W,Sa,Su	15,737	15,740	15,644	16,024	17,431	19,368	19,402	19,337
16	Bethesda-Silver Spring	J1,2,3	W,Sa,Su	57,603	57,465	61,053	62,472	60,097	60,131	60,541	60,450
629	College Park-Bethesda Limited	J4	W (Sat Hol)	10,379	10,379	10,216	11,819	11,994	12,027	12,079	12,081
85	New Hampshire Avenue-Maryland	K6	W,Sa,Su	42,147	42,158	42,089	44,639	45,561	45,173	47,007	46,962
83	New Hampshire Avenue-Limited	K9	W (Sat Hol)	0	0	0	3,954	8,749	10,329	13,024	13,020
47	Forestville	K11,12,13	W,Sa,Su	19,205	19,206	19,234	20,006	19,295	19,433	21,004	20,925
41	Eastover-Addison Road	P12	W,Sa,Su	46,144	46,200	46,173	47,819	50,606	50,952	46,702	46,347
88	Oxon Hill-Fort Washington	P17,18,19	W (Sat Hol)	25,164	25,169	25,029	25,864	24,947	24,942	25,249	25,225
123	Veirs Mill Road	Q1,2,4,5,6	W,Sa,Su	69,824	69,736	69,468	71,088	68,933	68,967	69,051	68,851
800	Riggs Road	R1,2	W,Sa,Su	29,434	29,461	29,163	27,325	26,591	26,652	27,134	27,048
542	Rhode Island Ave. -New Carrollton	T14	W,Sa,Su	0	0	0	0	0	0	17,232	17,206
9	Annapolis Road	T18	W,Sa,Su	21,614	21,629	21,584	22,981	23,382	26,313	27,691	27,593
790	District Heights-Suitland	V11,12	W,Sa,Su	16,364	16,371	0	0	0	0	0	0
790	District Heights-Suitland	V12	W,Sa,Su	0	0	16,428	17,135	16,458	16,474	19,093	19,216
580	Bock Road	W13,14	W (Sat Hol)	13,664	13,821	13,575	14,302	13,939	13,982	14,352	14,072
40	Camp Springs-Indian Head Highway	W15	W (Sat Hol)	4,403	4,488	4,426	4,904	4,790	4,694	0	0
53	Georgia Avenue-Maryland	Y4,7,8	W,Sa,Su	59,124	59,395	59,579	63,235	63,681	70,975	71,952	73,614
147	Fairland	Z8	W,Sa,Su	36,594	36,655	36,701	37,892	36,321	36,319	36,504	36,206
<b>SUBTOTAL Regional MD</b>				<b>828,831</b>	<b>830,288</b>	<b>822,385</b>	<b>874,355</b>	<b>868,570</b>	<b>886,898</b>	<b>893,716</b>	<b>892,750</b>

\* Reflects adjusted numbers

<b>Metrobus Regional and Non-Regional Route Summary</b>											
<b>MD NON-REGIONAL ROUTES - PLATFORM HOURS</b>											
<b>Line #</b>	<b>Line Name</b>	<b>Routes</b>	<b>Sched Days</b>	<b>FY2010</b>	<b>FY2011</b>	<b>FY2012</b>	<b>FY2013*</b>	<b>FY2014*</b>	<b>FY2015*</b>	<b>FY2016</b>	<b>FY2017</b>
526	Laurel Express	87	W (Sat Hol)	9,809	9,818	9,584	9,965	9,663	8,594	9,183	9,144
525	Laurel	89,89M	W (Sat Hol)	8,228	8,236	8,015	8,377	8,143	8,990	10,218	10,838
20	Bowie State University	B21,22	W (Sat Hol)	7,348	7,344	7,258	8,022	7,824	7,790	7,821	7,790
19	Bowie-Belair	B24,25	W (Sat Hol)	10,574	10,583	10,366	10,797	10,398	10,331	10,506	10,482
65	Bowie-New Carrollton	B27	W	3,472	3,468	3,418	3,517	3,418	3,340	3,473	3,501
634	Crofton-New Carrollton	B29,31	W (Sat Hol)	3,222	3,213	3,171	3,212	3,104	3,104	3,116	3,104
647	Greenbelt-BWI Airport Express	B30	W,Sa,Su	17,469	17,480	17,452	18,187	17,441	17,441	17,491	17,441
152	Central Avenue	C21,22, 25,26,29	W,Sa,Su	27,162	27,175	0	0	0	0	0	0
152	Central Avenue	C21,22,26,29	W,Sa,Su	0	0	27,022	28,590	27,845	27,839	28,062	28,024
252	Central Avenue Extra service	C27	W,Sa,Su	0	0	0	382	595	299	2,038	2,038
26	Pointer Ridge	C28	W (Sat Hol)	6,005	6,018	5,911	6,199	6,298	6,298	6,323	6,295
96	Prince George's-Langley Park	F8	W,Sa,Su	18,019	18,030	17,951	18,702	18,045	18,070	18,028	17,970
10	Ardwick Industrial Park Shuttle	F12	W (Sat Hol)	6,864	6,860	6,756	7,059	6,863	6,946	6,973	6,948
149	Cheverly-Washington Business Park	F13	W (Sat Hol)	8,934	8,925	8,793	9,188	9,150	9,150	9,186	9,150
105	Sheriff Road-Capitol Heights	F14	W,Sa	20,197	20,242	20,058	20,844	20,129	20,110	20,123	20,046
527	Greenbelt-New Carrollton	G12,13,14,16	W,Sa	0	0	31,531	33,010	32,147	32,199	32,320	32,319
67	Twinbrook-Silver Spring	J5	W (Sat Hol)	4,127	4,131	4,062	4,180	4,062	4,062	4,078	4,062
6	I-270 Express	J7,9	W (Sat Hol)	8,364	8,288	8,145	8,586	8,421	8,421	8,455	8,421
72	Marlboro Pike	J11,12,13	W,Sa,Su	0	0	12,622	13,085	12,530	12,484	12,524	12,576
72	Marlboro Pike	J11,12,13,14,15	W,Sa,Su	12,675	12,675	0	0	0	0	0	0
33	Connecticut Avenue-Maryland	L8	W (Sat Hol)	20,591	20,604	20,457	21,323	20,729	20,728	20,835	20,753
7	National Harbor	NH1	W,Sa,Su	14,405	14,437	14,452	15,171	14,661	15,052	18,340	18,297
801	Greenbelt-Prince George's Plaza	R3	W,Sa,Su	15,291	15,305	15,157	4,683	4,672	4,669	4,687	4,669
802	Queens Chapel Road	R4	W,Sa,Su	12,183	12,259	12,207	12,649	12,208	12,208	12,359	12,362
36	Kenilworth Avenue	R11,12	W,Sa	0	0	16,662	17,267	16,655	16,839	16,883	0
36	Kenilworth Avenue-New Carrollton	R12	W,Sa	25,626	25,676	0	0	0	0	0	16,739
102	River Road	T2	W (Sat Hol)	19,984	19,992	19,582	20,337	19,775	19,827	19,913	19,835
132	Greenbelt	T16,17	W,Sa	17,336	17,364	0	0	0	0	0	0
38	District Heights-Seat Pleasant	V14,15	W,Sa,Su	16,977	16,989	17,109	17,958	17,387	17,512	17,469	17,576
645	Indian Head Express	W19	W (Sat Hol)	12,929	12,929	12,726	11,511	10,444	10,480	10,548	10,334
30	Colesville-Ashton	Z2	W (Sat Hol)	11,539	11,526	11,354	12,042	11,625	11,596	11,642	11,596
146	Calverton-Westfarm	Z6	W (Sat Hol)	22,512	22,644	22,188	22,272	21,555	21,199	21,226	21,219
104	Laurel-Burtonsville Express	Z9,29	W (Sat Hol)	10,604	10,965	10,919	11,374	10,824	10,634	10,676	10,705
531	Greencastle-Briggs Chaney Express	Z11,13	W (Sat Hol)	12,402	12,597	12,525	13,269	12,955	12,905	12,938	12,887
<b>SUBTOTAL Non-Regional MD</b>				<b>384,845</b>	<b>385,773</b>	<b>387,451</b>	<b>391,759</b>	<b>379,565</b>	<b>379,118</b>	<b>387,432</b>	<b>387,121</b>

\* Reflects adjusted numbers

Metrobus Regional and Non-Regional Route Summary												
VA REGIONAL ROUTES - PLATFORM HOURS												
Line #	Line Name	Routes	R/N/R	Sched Days	FY2010	FY2011	FY2012	FY2013*	FY2014*	FY2015*	FY2016	FY2017
137	Wilson Boulevard	1A,B,E,F,Z	R	W,Sa,Su	41,388	42,816	42,757	44,247	0	0	0	0
137	Wilson Boulevard-Vienna	1A,B,E,Z		W,Sa,Su	0	0	0	0	44,863	47,690	48,122	47,379
139	Fair Oaks-Dunn Loring	1C	R	W,Sa,Su	17,261	17,282	17,405	18,087	0	0	0	0
139	Fair Oaks-Fairfax Boulevard	1C	R	W,Sa,Su	0	0	0	0	19,212	21,224	21,466	21,424
126	Washington Boulevard-Dunn Loring	2A		W,Sa,Su	0	0	0	0	34,249	29,557	29,496	29,926
126	Washington Boulevard	2A,B,C,G	R	W,Sa,Su	39,648	40,519	40,724	41,810	0	0	0	0
128	Fair Oaks-Jermantown Road	2B		W,Sa	0	0	0	0	9,070	17,254	17,025	16,669
127	Tysons Corner-Dunn Loring	2T	R	W,Sa,Su	14,969	15,037	15,030	15,766	15,006	14,154	13,918	13,876
69	Lee Highway- Falls Church	3A		W,Sa,Su	0	0	0	0	31,881	31,577	32,097	12,708
69	Lee Highway	3A,B,E	R	W,Sa,Su	33,709	33,819	33,147	34,571	0	0	0	0
121	Pimmit Hills	3T	R	W,Sa	18,623	18,664	18,544	17,839	18,302	20,017	20,372	20,541
138	Lee Highway-Farragut Square	3Y	R	W	3,345	3,341	3,292	4,921	4,886	4,865	4,884	5,651
94	Pershing Drive-Arlington Blvd	4A,B		W,Sa,Su	0	0	0	0	27,161	26,764	26,956	26,845
94	Pershing Drive-Arlington Boulevard	4A,B,E,H	R	W,Sa,Su	24,746	24,797	24,247	28,533	0	0	0	0
129	DC-Dulles	5A	R	W,Sa,Su	23,177	24,046	23,969	25,039	24,177	24,098	24,699	24,620
70	Lincolnia-North Fairlington	7A,B,C,D,E,F,H,P,W,X	R	W,Sa,Su	42,044	42,084	0	0	0	0	0	0
70	Lincolnia-North Fairlington	7A,E,F,Y	R	W,Sa,Su	0	0	34,212	35,433	0	0	0	0
70	Lincolnia-North Fairlington	7A,F,Y		W,Sa,Su	0	0	0	0	34,718	35,227	35,636	36,053
76	Lincolnia-Park Center-Pentagon	7B,C,H,P,W,X	R	W (Sat Hol)	0	0	14,759	14,249	14,333	14,350	0	0
76	Lincolnia-Park Center-Pentagon	7C,H,P,W,X	R	W (Sat Hol)	0	0	14,759	14,249	14,333	14,350	12,897	12,876
106	Foxchase-Seminary Valley	8S,W,X,Z	R	W (Sat Hol)	12,601	12,623	12,588	12,948	0	0	0	0
106	Foxchase-Seminary Valley	8S,W,Z		W (Sat Hol)	0	0	0	0	12,109	10,242	9,981	9,942
31	Huntington-Pentagon	9A,E	R	W,Sa,Su	23,702	23,719	23,721	25,838	24,939	21,809	21,918	21,853
2	Hunting Point-Pentagon	10A,E,R,S	R	W,Sa,Su	22,866	22,267	23,055	26,108	25,076	27,749	27,729	27,633
156	Hunting Point-Ballston	10B	R	W,Sa,Su	29,046	29,368	29,363	32,317	33,893	30,175	30,266	30,173
157	Mt Vernon Express	11Y	R	W (Sat Hol)	6,171	6,171	6,074	6,251	6,118	6,997	7,326	7,329
39	National Airport-Pentagon-Washington	13A,B,F,G	R	W,Sa,Su	12,764	11,017	0	0	0	0	0	0
39	National Airport-Pentagon-Washington	13F,G	R	Sa,Su	0	0	804	863	806	0	0	0
39	Arlington Union Station	13Y	R	Sa,Su					0	776	804	808
27	Chain Bridge Road	15K,L	R	W (Sat Hol)	5,750	6,095	5,873	6,113	6,129	7,466	8,135	8,091
24	George Mason-Tysons Corner	15M	R	W (Sat Hol)	6,082	5,891	5,815	5,984	7,057	8,270	8,303	8,270
142	Columbia Pike	16A,B,D,E,F,J,P	R	W,Sa,Su	56,853	57,709	0	0	0	0	0	0
142	Columbia Pike	16A,B,D,E,J,P	R	W,Sa,Su	0	0	54,426	56,498	54,048	53,665	0	0
142	Columbia Pike	16A,B,E,J,P	R	W,Sa,Su	0	0	54,426	56,498	54,048	53,665	55,709	55,533
144	Columbia Pike-Federal Triangle	16F	R	W (Sat Hol)	0	0	9,651	0	0	0	0	0
143	Columbia Heights West-Pentagon City	16G,H,K	R	W,Sa,Su	33,521	33,533	34,066	35,590	34,454	34,360	34,479	34,513
521	Annandale-Skyline City-Pentagon	16L	R	W	1,768	1,760	1,849	1,900	1,832	2,174	4,502	4,556
144	Columbia Pike-Federal Triangle	16X	R	W	0	0	0	10,108	9,396	9,595	9,632	9,615
522	Columbia Pike-Farragut Square	16Y	R	W (Sat Hol)	10,481	10,634	10,421	13,270	13,914	14,014	14,070	14,014
512	Barcroft-South Fairlington	22A,B	R	W,Sa	15,791	15,749	19,254	19,907	19,169	19,175	0	0
512	Barcroft-South Fairlington	22A,B,C,F	R	W,Sa	15,791	15,749	19,254	19,907	19,169	19,175	31,185	31,376
54	McLean-Crystal City	23A,C	R	W,Sa,Su	48,702	48,784	48,635	52,005	49,799	0	0	0
54	McLean-Crystal City	23A,B,T	R	W,Sa,Su					0	46,763	46,986	46,833
120	Ballston-Pentagon	24P	R	W	1,906	0	0	0	0	0	0	0
92	Ballston-Bradlee-Pentagon	25A,C,D	R	W,Sa,Su	19,577	19,542	19,550	0	0	0	0	0
92	Ballston-Bradlee-Pentagon	25A,C,D,E	R	W,Sa,Su	0	0	0	20,604	19,866	19,993	0	0
3	Landmark-Ballston	25B	R	W,Sa	16,084	16,152	16,397	18,806	19,099	18,284	28,780	28,783
692	Annandale-East Falls Church	26A	R	W	0	0	0	0	3,808	7,685	8,379	12,136
5	Leesburg Pike	28A	R	W,Sa,Su	0	0	0	44,503	50,906	61,200	63,672	63,698
5	Leesburg Pike	28A,X	R	W,Sa,Su	42,010	48,514	48,255	0	0	0	0	0
110	Skyline City	28F,G	R	W (Sat Hol)	4,480	4,488	4,694	5,264	5,131	4,416	5,875	5,895
122	Tysons Corner-West Falls Church	28T	R	W (Sat Hol)	10,404	10,404	10,232	10,530	10,239	1,551	0	0
23	Leesburg Pike Limited	28X	R	W (Sat Hol)	0	0	0	14,603	15,446	14,896	14,599	14,541
8	Annandale	29C,E,G,H,X	R	W (Sat Hol)	20,311	20,324	19,695	21,207	21,702	24,759	0	0
8	Annandale	29C,G	R	W (Sat Hol)	20,311	20,324	19,695	21,207	21,702	24,759	13,427	13,286
4	Alexandria-Fairfax	29K,N	R	W,Sa	20,539	20,588	20,522	21,479	23,971	29,225	29,706	29,642
58	Braeburn Drive - Pentagon Express	29W	R	W							4,208	4,192
12	Ballston-Farragut Square	38B	R	W,Sa,Su	37,448	37,481	37,436	38,495	36,794	41,800	43,748	42,718
131	Richmond Highway Express	REX (R99)	R	W,Sa,Su	37,214	37,377	37,411	42,276	41,035	43,490	44,030	43,811
	SUBTOTAL Regional VA				731,805	738,549	743,906	798,923	800,416	959,253	855,017	837,830

\* Reflects adjusted numbers

<b>Metrobus Regional and Non-Regional Route Summary</b>											
<b>VA NON-REGIONAL ROUTES - PLATFORM HOURS</b>											
<b>Line #</b>	<b>Line Name</b>	<b>Routes</b>	<b>Sched Days</b>	<b>FY2010</b>	<b>FY2011</b>	<b>FY2012</b>	<b>FY2013*</b>	<b>FY2014*</b>	<b>FY2015*</b>	<b>FY2016</b>	<b>FY2017</b>
124	Vienna Oakton	2W	W	0	0	0	0	0	0	0	0
80	Mark Center-Pentagon	7M	W (Sat Hol)	0	0	0	11188.7	10467.9	9238.32	9273.6	9,166
155	Centreville South	12A,E,F,G *	W	0	0	0	0	0	0	0	0
145	Centreville North	12C,D *	W	0	0	0	0	0	0	0	0
153	Little rocky Run- Vienna	12L,M *	W	0	0	0	0	0	0	0	0
154	Stringfellow Road- Vienna	12R,S *	W	0	0	0	0	0	0	0	0
66	Kings Park	17A,B,F,M	W (Sat Hol)	15,003	14,994	14,989	14,364	13,853	13,957	14,057	14,200
61	Kings Park Express	17G,H,K,L	W (Sat Hol)	23,762	23,537	23,226	23,619	22,718	22,599	22,741	23,049
116	Springfield	18E,F	W (Sat Hol)	4,526	4,539	4,455	4,662	4,550	5,218	5,355	5,334
87	Orange Hunt	18G,H,J	W(Sat Hol)	11,063	11,067	10,889	11,236	10,110	9,361	9,429	9,392
541	Burke Centre	18P,R,S	W (Sat Hol)	18,020	17,825	17,771	18,655	17,813	17,019	17,311	17,246
60	Chantilly- Greenbriar	20,F,W,X	W	0	0	0	0	0	0	0	0
68	Landmark- Pentagon	21A,D	W (Sat Hol)	5,402	5,432	5,350	5,669	5,511	5,874	5,961	5,938
511	Pentagon-Army-Navy Drive-Shirley Park	22B	W	0	0	0	0	0	0	0	0
140	McLean Hamlet-East Falls Church	24T	W (Sat Hol)	4,097	4,106	4,033	4,349	4,064	620	0	0
148	Metroway Potomac Yard	MW-1	W (Sat Hol)	10,051	10,047	9,894	10,300	10,012	31,114	34,901	34,806
640	Springfield Circulator	TAGS (S80,91)	W (Sat Hol)	12,822	12,929	12,713	13,262	12,892	12,873	13,159	13,109
	West Park Shuttle			0	0	0	0	0	1,958	0	0
	<b>SUBTOTAL Non-Regional VA</b>			<b>104,746</b>	<b>104,476</b>	<b>103,320</b>	<b>117,305</b>	<b>111,991</b>	<b>129,831</b>	<b>132,187</b>	<b>132,237</b>

\* Reflects adjusted numbers

**Metrorail Operating Statistics**

<b>Metrorail Statistics: FY 2014 - FY 2017</b> (in thousands)				
	<b>FY2014</b>	<b>FY2015</b>	<b>FY2016</b>	<b>FY2017</b>
	<b>Actual</b>	<b>Actual *</b>	<b>Approved</b>	<b>Proposed</b>
<b>STATISTICS:</b>				
Total Railcar Miles	76,218	99,124	99,366	99,489
Total Revenue Service Miles	74,087	97,524	97,766	96,889
Total Passengers	204,067	206,396	216,405	201,500
Total Passenger Revenue	\$596,734	\$629,055	\$635,951	\$614,618
Total Operating Revenue	\$680,875	\$721,986	\$748,164	\$702,930
Total Operating Expense	\$964,348	\$965,392	\$1,058,513	\$952,958
Gross Subsidy	\$283,473	\$243,406	\$310,349	\$250,027
Net Local Subsidy	\$263,211	\$223,144	\$290,087	\$250,027
<b>RATIOS:</b>				
Passengers Per Revenue Service Mile	2.75	2.12	2.21	2.08
Cost Per Total Railcar Mile	\$12.65	\$9.74	\$10.65	\$9.58
Cost Per Passenger	\$4.73	\$4.68	\$4.89	\$4.73
Net Subsidy Per Passenger	\$1.29	\$1.08	\$1.34	\$1.24
Average Passenger Fare	\$2.92	\$3.05	\$2.94	\$3.05
Percentage of Operating Cost				
Recovered from Passenger Revenues	61.9%	65.2%	60.1%	64.5%
Percentage of Operating Cost				
Recovered from all Operating Revenues	70.6%	74.8%	70.7%	73.8%
* Total Railcar Miles and Revenue Service Miles are scheduled not actual				

<b>Rail Car Miles</b>					
	<b>FY2013</b>	<b>FY2014</b>	<b>FY2015</b>	<b>FY2016</b>	<b>FY2017 Proposed</b>
Red Line	27,915,168	27,921,100	27,916,500	28,011,000	27,886,100
Blue Line	14,626,741	12,438,200	12,848,700	13,858,400	12,953,100
Orange Line	15,405,908	15,742,200	14,595,100	14,368,900	14,421,400
Yellow Line	6,461,373	9,254,400	10,630,700	10,390,300	10,332,800
Green Line	12,069,838	11,991,300	12,276,900	12,132,400	12,101,000
Silver Line	-	7,998,000	16,698,700	16,447,300	16,637,300
Scheduled Revenue Service Miles	76,479,028	<b>85,345,200</b>	<b>94,966,600</b>	<b>95,208,300</b>	<b>94,331,700</b>
Verizon Arena	1,711,283	1,711,283	1,711,283	1,711,283	1,711,283
Gap Trains	300,000	360,000	360,000	360,000	360,000
National Baseball	486,000	486,000	486,000	486,000	486,000
Six-Car vs Four-Car off Peak*	-	-	-	-	-
Rush Plus	1,200,000				
50% 8-car Train Program**	<u>3,501,450</u>				
<b>Sub-Total Revenue Service Miles</b>	<b>83,677,761</b>	<b>87,902,483</b>	<b>97,523,883</b>	<b>97,765,583</b>	<b>96,888,983</b>
Start-Up/Car Testing	200,000	200,000	200,000	200,000	200,000
Revenue Collection	700,000	700,000	700,000	700,000	700,000
Other	700,000	700,000	700,000	700,000	700,000
<b>Total Car Miles</b>	<b>85,277,761</b>	<b>89,502,483</b>	<b>99,123,883</b>	<b>99,365,583</b>	<b>98,488,983</b>
<i>*Includes miles for Red Line turn back and Yellow Line extension</i>					
<i>**Previously named "6000 / Metro Matters Car Deployment"</i>					

Payhours for Rail Operators and Station Managers: FY2017

FY2017 Train Operator Wages			
Category	Payhours	Average Hourly Rate	Budget
Scheduled F/T	1,123,241	\$31.11	\$34,944,028
Scheduled P/T (1)	46,800	\$33.21	1,554,228
Car Testing/Start Up	24,960	\$31.11	776,506
Interlocking Pay Hours	112,731	\$37.03	4,174,172
<b>Subtotal:</b>	<b>1,307,732</b>		<b>\$41,448,933</b>
NonScheduled Overtime/Special Event	203,602	\$46.67	\$9,501,087
Standing Extra	12,565	\$31.11	\$390,889
Utility	50,542	\$36.27	\$1,833,144
Training	62,257	\$31.11	\$1,936,828
Retraining	33,530	\$31.11	\$1,043,132
Misc.	39,931	\$31.11	\$1,242,263
Funeral/Other	1,997	\$31.11	\$62,123
Vacation	76,563	\$31.11	\$2,381,884
Sick	61,475	\$31.11	\$1,912,477
Holiday	40,766	\$31.11	\$1,268,215
<b>Subtotal:</b>	<b>583,228</b>		<b>\$21,572,044</b>
<b>Total:</b>	<b>1,890,960</b>		<b>\$63,020,977</b>

FY2017 Station Manager Wages			
Category	Payhours	Average Hourly Rate	Budget
Scheduled F/T	1,028,656	\$32.53	\$33,462,180
<b>Subtotal:</b>	<b>1,028,656</b>		<b>\$33,462,180</b>
NonScheduled Overtime/Special Event	103,828	\$48.79	\$5,065,766
Standing Extra	11,586	\$32.53	\$376,883
Utility	51,429	\$38.42	\$1,975,908
Training	35,727	\$32.53	\$1,162,215
Retraining	29,903	\$32.53	\$972,737
Misc.	32,610	\$32.53	\$1,060,800
Funeral/Other	1,783	\$32.53	\$57,990
Vacation	69,860	\$32.53	\$2,272,548
Sick	55,085	\$32.53	\$1,791,928
Holiday	36,529	\$32.53	\$1,188,280
<b>Subtotal:</b>	<b>428,340</b>		<b>\$15,925,055</b>
<b>Total:</b>	<b>1,456,996</b>		<b>\$49,387,234</b>

**GRAND TOTAL**

**\$112,408,211**

(1) Maximum 30 hours work week



Rail Peak Period Service Levels: FY2014 - FY2017				
<u>Rail Lines</u>	<u>FY2014</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>
Red Line	Glenmont/Shady Grove Silver Spring/Grosvenor	Glenmont/Shady Grove Silver Spring/Grosvenor	Glenmont/Shady Grove Silver Spring/Grosvenor	Glenmont/Shady Grove Silver Spring/Grosvenor
Blue Line	Largo/Franconia-Springfield	Largo/Franconia-Springfield	Largo/Franconia-Springfield	Largo/Franconia-Springfield
Orange Line	New Carrollton/Vienna Largo/Vienna	New Carrollton/Vienna	New Carrollton/Vienna	New Carrollton/Vienna
Yellow Line	Huntington/Mt. Vernon Sq. Franconia-Springfield/Greenbelt	Huntington/Mt. Vernon Sq. Franconia-Springfield/Greenbelt	Huntington/Mt. Vernon Sq. Franconia-Springfield/Greenbelt	Huntington/Mt. Vernon Sq. Franconia-Springfield/Greenbe
Green Line	Greenbelt/Branch Ave.	Greenbelt/Branch Ave.	Greenbelt/Branch Ave.	Greenbelt/Branch Ave.
Silver Line		Weihle-Reston East/Largo	Weihle-Reston East/Largo	Weihle-Reston East/Largo
<b><u>RUSH HOURS TRAIN:</u></b>	<b><u>FY2014</u></b>	<b><u>FY2015</u></b>	<b><u>FY2016</u></b>	<b><u>FY2017</u></b>
Red Line	41	41	41	41
Blue Line	16	12	12	12
Orange Line	33	22	22	22
Yellow Line	17	21	21	21
Green Line	20	18	18	18
Silver Line		26	26	26
Gap	5	3	3	3
Start-up	1			
<b>TOTAL</b>	<b>133</b>	<b>143</b>	<b>143</b>	<b>143</b>

Rail Service Levels: FY2014 - FY2017		FY2014	FY2015	FY2016	FY2017	
<b>RUSH HOUR HEADWAYS (MINUTES BETWEEN TRAINS) BY LINE</b>						
Red Line	Glenmont-Shady Grove	6	6	6	6	
	Silver Spring-Grosvenor	6	6	6	6	
Orange Line *	Vienna - New Carrollton	6	6	6	6	
	Vienna - Largo	18				
Blue Line	Largo/Franconia-Springfield	6/12	12	12	12	
Yellow Line	Huntington - Mt. Vernon Sq.	6	6	6	6	
	Greenbelt - Franconia Springfield	18	12	12	12	
Green Line *	Greenbelt/Branch Ave.	6	6	6	6	
Silver Line	Weihle-Reston East/Largo		6	6	6	
<i>*During times of observed peaking in ridership, additional trains ("trippers") are operated to reduce crowding.</i>						
<b>NON-RUSH HOUR HEADWAYS BY LINE (MIDDAY-WEEKDAY/SAT/SUN/LATE NIGHT)</b>						
Red Line:	Glenmont-Shady Grove	12/12/15/15	12/12/15/15	12/12/15/15	12/12/15/15	
	Silver Spring-Shady Grove	12/12/15	12/12/15	12/12/15	12/12/15	
Orange Line	New Carrollton/Vienna	12/12/15/20	12/12/15/20	12/12/15/20	12/12/15/20	
Blue Line	Largo/Franconia-Springfield	12/12/15/20	12/12/15/20	12/12/15/20	12/12/15/20	
Yellow Line:	Huntington-Fort Totten	12/12/15/20	12/12/15/20	12/12/15/20	12/12/15/20	
Green Line	Greenbelt/Branch Ave.	12/12/15/20	12/12/15/20	12/12/15/20	12/12/15/20	
Silver Line	Weihle-Reston East/Largo		12/12/15/20	12/12/15/20	12/12/15/20	
<b>AVERAGE COMBINED HEADWAYS FOR KEY SEGMENTS FOR FY2017</b>						
			Mid-day			Late Night
		Rush Hour	Weekdays	Saturday	Sunday	
Red	Silver Spring to Grosvenor	3	6	6	7.5	15
Orange/Blue/Silver	Rosslyn to Stadium Armory	2-4	4	4	5	7
Yellow/Green	L'Enfant Plaza to Mount Vernon	2-4	6	6	7.5	10
Yellow/Blue	King Street to Pentagon	2-4	6	6	7.5	10

## Rail Service Levels: FY2014 - FY2017

	FY2014	FY2015	FY2016	FY2017
<b><u>PEAK SCHEDULED RAILCARS</u></b>				
Red Line	288	288	288	288
Blue Line	96	84	84	84
Orange Line	222	154	154	154
Yellow Line	102	126	126	126
Green Line	140	128	128	128
Silver Line		156	156	156
50% 8-Car Train Program*	34	-	-	-
Option Cars	-	-	-	-
Gap	30	18	18	18
<b>Total Scheduled Car</b>	<b>912</b>	<b>954</b>	<b>954</b>	<b>954</b>
Spares (20%)	182	146	146	146
Revenue Collection	4	4	4	4
<b>Total Car Requirement</b>	<b>1,098</b>	<b>1,104</b>	<b>1,104</b>	<b>1,104</b>
<b><u>HOURS OF OPERATION</u></b>				
Weekday (Mon-Thur)	19	19	19	19
Friday	22	22	22	22
Saturday	20	20	20	20
Sunday	17	17	17	17
<b><u>DAYS OF OPERATION</u></b>				
Weekday	252	251	252	251
Saturday	56	57	57	57
Sunday	57	57	57	57

\*Note: previously "6000 series"

Rail Service Levels: FY2014 - FY2017

	FY2014	FY2015	FY2016	FY2017
--	--------	--------	--------	--------

**CARS PER TRAIN RUSH HOUR**

Red Line	20-6's/21-8's	20-6's/21-8's	20-6's/21-8's	20-6's/21-8's
Blue Line	16-6's	6-6's/6-8's	6-6's/6-8's	6-6's/6-8's
Orange Line	21-6's/12-8's	11-6's/11-8's	11-6's/11-8's	11-6's/11-8's
Yellow Line	17-6's	21-6's	21-6's	21-6's
Green Line	10-6's/10-8's	8-6's/10-8's	8-6's/10-8's	8-6's/10-8's
Silver Line		26-6's	26-6's	26-6's
Gap	5's-6's	3's-6's	3's-6's	3's-6's

**CARS PER TRAIN WEEKDAY BASE/NIGHT (AFTER 8 P.M.)**

Red Line	6/6	6/6	6/6	6/6
Blue Line	6/6	6/6	6/6	6/6
Orange Line	6/6	6/6	6/6	6/6
Yellow Line	6/6	6/6	6/6	6/6
Green Line	6/6	6/6	6/6	6/6
Silver Line		6/6	6/6	6/6

## Railcar Fleet Profile

Manufacturer	Series	Number Owned	Years Purchased	Number for Service*
Rohr Industries	1000	300	1974-1978	270
Breda Construzioni Ferroviarie	2000	76	1983-1984	76
	3000	290	1984-1988	280
	4000	100	1992-1994	100
Construcciones y Auxiliar de Ferrocarriles, S.A. (CAF)	5000	192	2001-2004	186
Alstom	6000	184	2006-2008	182
Kawasaki	7000	72	2014-Present	40
<b>Total</b>		<b>1,214</b>		<b>1,134</b>

\*There are 4 1K vehicles dedicated for revenue collection, 22 vehicles decommissioned, 22 vehicles accident damaged and 16 7K vehicles in use for training. As of November 20,2015 72 7000 series cars have been delivered, 60 have been accepted and 40 are in service.

Rail Car Fleet Storage Capacity			
Location	Existing Storage Capacity	Current Fleet Need	Net Storage Capacity
Alexandria	176	176	-
Branch Ave	166	92	74
Brentwood	86	106	(20)
Glenmont	132	78	54
Greenbelt	284	190	94
Largo	42	44	(2)
New Carrollton	114	140	(26)
Shady Grove	168	168	-
West Falls Church	148	178	(30)
<b>Total</b>	<b>1,316</b>	<b>1,172</b>	<b>144</b>

**WMATA PARK AND RIDE  
BASE AND SURCHARGE FEES  
As of July 1, 2016**

Station / Region	Capacity (parking spaces)	Parking Fee To Customer	Base Revenue To WMATA	Revenue To Reserve Fund
<b><u>MONTGOMERY COUNTY</u></b>				
Grosvenor	1,894	\$5.10	\$3.60	\$1.50
White Flint	1,270	\$5.10	\$3.60	\$1.50
<i>White Flint-Non-Metro</i>		<b>\$8.60</b>	<b>\$7.10</b>	<b>\$1.50</b>
Twinbrook	1,097	\$5.10	\$3.60	\$1.50
<i>Twinbrook-Non-Metro</i>		<b>\$8.60</b>	<b>\$7.10</b>	<b>\$1.50</b>
Rockville	524	\$5.10	\$3.60	\$1.50
Shady Grove	5,745	\$5.10	\$3.60	\$1.50
Glenmont	2,998	\$5.10	\$3.60	\$1.50
Wheaton	977	\$4.35	\$3.60	\$0.75
Forest Glen	596	\$5.10	\$3.60	\$1.50
<b><u>PRINCE GEORGE'S COUNTY</u></b>				
New Carrollton	3,519	\$5.10	\$3.85	\$1.25
<i>New Carrollton-Non Metro</i>		<b>\$8.85</b>	<b>\$7.60</b>	<b>\$1.25</b>
Landover	1,866	\$4.60	\$3.85	\$0.75
Cheverly	500	\$5.10	\$3.85	\$1.25
Addison Road	1,268	\$4.60	\$3.85	\$0.75
Capitol Heights	372	\$5.10	\$3.85	\$1.25
Greenbelt	3,399	\$5.10	\$3.85	\$1.25
College Park	1,820	\$5.10	\$3.85	\$1.25
P.G. Plaza	1,068	\$4.60	\$3.85	\$0.75
West Hyattsville	453	\$5.10	\$3.85	\$1.25
Southern Avenue	1,980	\$5.10	\$3.85	\$1.25
Naylor Road	368	\$5.10	\$3.85	\$1.25
Suitland Garage	1,890	\$5.10	\$3.85	\$1.25
Branch Avenue	3,072	\$5.10	\$3.85	\$1.25
Morgan Blvd.	608	\$5.10	\$3.85	\$1.25
Largo	2,200	\$5.10	\$3.85	\$1.25
<b><u>DISTRICT OF COLUMBIA</u></b>				
Deanwood	194	\$4.60	\$4.60	
Minnesota Ave.	333	\$4.60	\$4.60	
Rhode Island Ave.	221	\$4.60	\$4.60	
Fort Totten	408	\$4.60	\$4.60	
Anacostia Garage	808	\$4.60	\$4.60	
<b><u>NORTHERN VIRGINIA</u></b>				
Huntington	3,617	\$4.85	\$3.60	\$1.25
West Falls Church	2,009	\$4.85	\$3.85	\$1.00
Dunn Loring	1,326	\$4.85	\$3.60	\$1.25
Vienna	5,169	\$4.85	\$3.60	\$1.25
Franconia	5,069	\$4.85	\$3.60	\$1.25
Van Dorn	361	\$4.85	\$4.35	\$0.50
East Falls Church	422	\$4.85	\$3.85	\$1.00
<b>System Total</b>	<b>59,421</b>			

*Note: The parking facility at the new Silver Line station at Wiehle-Reston East in Northern Virginia has approximately 2300 spaces available for Metrorail riders, but the facility is not owned/operated by WMATA.*

**MetroAccess Revenue Vehicle Fleet Management Plan**

The MetroAccess Revenue Vehicle Fleet Management Plan is a tool that provides information, analysis, and recommendations about the anticipated growth in paratransit ridership, and the current and projected revenue vehicle requirements for MetroAccess to meet the demand as well as an assessment and projection of needs for paratransit vehicle maintenance. The information that follows reflects the most current data from the Federal Transit Administration Approved Plan.

**MetroAccess Statistics: FY2014 – FY2017**

	FY2014 Actual	FY2015 Actual	FY2016 Approved	FY2017 Proposed
<b>STATISTICS:</b>				
MetroAccess - Dedicated Fleet:	600	650	675	700
Total Passengers	2,126,318	2,234,805	2,335,000	2,440,000
Total Passenger Revenue (000s)	\$7,542	\$9,045	\$8,500	\$9,972
Total Revenue (000s)	\$7,542	\$9,045	\$8,500	\$9,972
Total Operating Expense (000s)	\$106,215	\$113,424	\$121,201	\$126,576
<b>RATIOS:</b>				
Cost Per Passenger	\$49.95	\$50.75	\$51.91	\$51.88
Subsidy Per Passenger*	\$46.41	\$46.71	\$48.27	\$47.79
Percentage of Operating Cost Recovered from Passenger Revenues	7.1%	8.0%	7.0%	7.9%
* MetroAccess policy provides two complimentary one-way trip credits, with a value of \$3 each, in each instance where the scheduled pick-up window is not met. Eligibility assessment trips are complimentary and Personal Care Attendants (PCAs) ride free in accordance with the				

<b>MetroAccess Statistics: FY2013 - FY2017</b>				
	<b>FY2014</b>	<b>FY2015</b>	<b>FY2016</b>	<b>FY2017</b>
	<b>Actual</b>	<b>Actual</b>	<b>Approved</b>	<b>Proposed</b>
Total # of Vans in Fleet	582	634	659	684
Total # of Low Floor Vans in Fleet	16	16	16	16
Total # of Shuttles in Fleet	2	0	0	0
	600	650	675	700

\*Fleet mix (Vans/Low Floor Vans) for FY17 is a projection.

<b>Active Proposed Fleet: FY2016-FY2017</b>				
		<b>Max Scheduled</b>	<b>Total Active</b>	<b>Vans/Low Floor</b>
		<b>Fleet</b>	<b>Fleet</b>	<b>Van/Shuttles</b>
FY2013 Year-End	Actual	600	600	582 / 16 / 2
FY2014 Year-End	Actual	600	600	582 / 16 / 2
FY2015 Year-End	Actual	650	650	634 / 16 / 0
FY2016 Year-End	Approved	675	675	659 / 16 / 0
FY2017 Year-End	Proposed	700	700	684 / 16 / 0

<b>MetroAccess Statistics: FY2013 - FY2017</b>			
Average age of fleet at end of FY2017 will be approximately 2.5 Years			
<b>Manufacturer</b>	<b>Fiscal Year Entered</b>	<b>Number of</b>	<b>Vehicle Type</b>
	<b>Service</b>	<b>Vans</b>	
FORD	2017	160	Vans
FORD	2016	165	Vans
FORD	2015	120	Vans
FORD	2014	120	Vans
FORD	2013	119	Vans
MV1/VPG	2013	2	Low Floor Vans
MV1/VPG	2012	14	Low Floor Vans
<b>Total Fleet Vehicles at End of FY2017</b>		<b>700</b>	



## Appendix G Glossary of Terms

AAC ( <i>Accessibility Advisory Committee</i> )	Metro's committee that was created to address the needs of senior citizens and customers with disabilities; efforts have resulted in numerous service upgrades including gap reducers, to make it easier for customers using wheelchairs to board Metrorail trains.
Accounting Basis	The accounting principles and methods appropriate for a government enterprise fund. Financial statements are prepared on the accrual basis of accounting under which revenues and expenses are recognized when earned or incurred.
Accrual Basis	Basis of Accounting where revenues are recognized when they are measurable and earned. Expenses are recorded when incurred.
ADA ( <i>Americans with Disabilities Act</i> )	Refers to Federal civil rights legislation passed in 1990 that requires public transportation services to be accessible to, and usable by, persons with disabilities. In compliance, Washington Metropolitan Area Transit Authority (Metro) operates Metrobus with a bus fleet equipped with passenger lifts and wheelchair tie downs, Metrorail with elevators and platforms that are ADA compliant and MetroAccess with a fleet of over 600 vans and sedans also equipped with lifts and tie downs.
Approved Budget	The revenue and expenditure plan approved by the Metro Board of Directors for a specific one year period starting on July 1.
ART ( <i>Arlington Transit</i> )	Refers to the bus service that operates within Arlington County, Virginia, providing access to Metrorail and supplementing Metrobus with smaller, neighborhood-friendly vehicles.
Articulated Bus <i>Also see "Slinky" bus</i>	Refers to buses that have an "accordion" section in the middle that allows the bus to bend and flex (articulate). Articulated buses have more passenger capacity than standard 40-foot buses.
AGM ( <i>Assistant General Manager</i> )	An executive who reports directly to the General Manager/CEO or a Deputy General Manager of Metro.
Assets	Property owned by Metro which has monetary value with a future benefit.

---

Balanced Budget	Refers to a budget where estimated revenues are equal to or greater than estimated expenses.
Board of Directors	The Board of Directors is a 16-member body composed of eight voting and eight alternate members responsible for corporate governance of Metro.
Bond	A written promise to pay a specified sum of money (face value) at a specified future date and the proposed means of financing them.
Bond Proceeds	Refers to additional local capital funds raised, when necessary, by issuance of revenue bonds in the municipal markets.
Budget	Refers to a financial operation embodying an estimate of revenues and expenditures for a fiscal period of 12 months or longer. This can be an operating or capital budget.
Budget Calendar	Refers to a schedule of key dates for specific milestones in the preparation and approval of a budget.
Budget Document	Refers to the official written statement and the supporting numbers prepared by the Financial staff for presentation for approval by the Board.
Budget Message	Refers to the general discussion of the budget document presented in writing as an overview, usually by the head of the organization.
Bus Shelter	A shelter for riders to wait for the bus, a canopy area with or without bench seating. In addition, the shelter includes a display case with bus information for Metrobus riders and is equipped with a trash receptacle.
Bus Stop	Refers to a stop indicated by a sign for riders to wait for the bus.
CAFR ( <i>Comprehensive Annual Financial Report</i> )	A report containing financial statements and statistical data that provides full disclosure of all material financial operations of Metro in conformity with generally accepted accounting principles.
Capital Assets	Assets of a material value and having a useful life of more than one year. Also called fixed assets.
Capital Budget	The portion of the budget that provides for the funding of improvements, projects and major equipment purchases.

---

Capital Improvement Program	The six-year plan of capital projects to be completed by Metro.
Cash Basis	Basis of Accounting whereby revenue and expense are recorded on the books of account when received and paid, respectively, without regard to the period to which they are incurred.
CNG ( <i>Compressed Natural Gas</i> )	A natural gas fuel used in a clean engine technology.
COLA ( <i>Cost of Living Adjustment</i> )	Cost of Living Adjustment (COLA) for inflation for employees.
Compact	Refers to interstate compact creating Metro; this is a special type of contract or agreement between the three jurisdictions within which the organization operates.
Contingency Funds	Operating and capital funds reserved for unexpected expenditures during the fiscal year which were not addressed in the annual budget.
Cost Allocation	Refers to expenses accounted for in one fund assigned to another fund. For example, certain operating expenses of a division may be charged to a capital project as overhead cost.
DC Circulator	Refers to a bus route funded by the DC Government with support from Metro to take persons to Washington, DC's premier cultural, shopping, dining, and business destinations.
Deadhead	Refers to non-revenue time when a bus or train is not carrying revenue passengers, usually a trip from, to, or between lines, yards or garages. Usually this refers to bus or rail travel to or from the garage or yard to a terminus or station where revenue service begins or ends.
Deficit	Refers to an excess of Liabilities over Assets or Expenses over Revenue.
Department	A major organizational unit that has overall responsibility for an operation or a group of operations within a functional area.
DGM	An executive who reports directly to the General Manager.

*(Deputy General Manager)*

Diesel Fuel	Fuel composed of petroleum distillates that have a boiling point and specific gravity higher than gasoline.
Division	Refers to a garage and yard facility where buses are stored, maintained, and dispatched into service.
Fairfax Connector	The bus system that runs seven days a week with service throughout Fairfax County, Virginia and to Metrorail stations on the Orange, Blue and Yellow lines, including the Pentagon.
Fare box recovery ratio	Refers to the ratio of passenger fares (including inter-agency agreements related to fares) to total operating costs.
Farecard	Refers to a paper pass used to ride Metrorail. Paper farecards are no longer sold in stations (as of December 2015) and will not be accepted at faregates for payment as of March 2016.
Flash Pass	Metrobus pass valid for unlimited use for a designated seven-day period.
Four-point Securement System	Refers to an onboard securement system for wheelchairs, three-wheel and four-wheel scooters. The system incorporates four seatbelt type straps that attach to the frame of a mobility device as a way to keep it from moving or rolling while on the bus.
FTA <i>(Federal Transit Administration)</i>	A federal administration within the U.S. Department of Transportation. The FTA provides stewardship of combined formula and discretionary programs to support a variety of locally planned, constructed, and operated public transportation systems throughout the United States.
GAAP <i>(Generally Accepted Accounting Principles)</i>	Accounting standards, revised periodically, to which both private and public organizations within the United States are expected to conform.
GM/CEO <i>(General Manager/Chief Executive Officer)</i>	The General Manager and Chief Executive Officer of Metro who reports directly to the Board.
Head Sign	Refers to the sign above the front windshield of a bus describing the line number or letter, its line name, and destination.

---

Headway ( <i>Frequency</i> )	Refers to time intervals between vehicles moving in the same direction on a particular route. Headway can change on a line during the day as rider demand changes.
JCC ( <i>Jurisdictional Coordinating Committee</i> )	The staff members from the jurisdictions supporting Metro. The JCC was established by the Board of Directors to facilitate the exchange of information between jurisdictions and Metro.
Kiss and Ride	Refers to an area within a station where commuters are driven by private car and dropped off to board Metrobus or Metrorail.
Kneeling Bus <i>Also see Passenger lift</i>	Refers to a feature on buses that lowers the floor to the curb or to near-curb level to make it easier for passengers to board, especially for seniors and persons with disabilities.
KPI ( <i>Key Performance Indicator</i> )	KPIs are Key Performance Indicators that measure long term progress in the strategic areas of safety, security, service reliability and customer satisfaction.
Layover Time <i>Also known as Spot time</i>	Refers to time built into a schedule between arrival and departure for bus drivers to rest; minimum times are set by union contract. Layovers normally occur at each end of a route to allow for a driver's break and schedule recovery, but they may be scheduled at other points to allow for timed transfer connections.
Liability	A debt or legal obligation arising from transactions in the past which must be liquidated, renewed or refunded at a future date.
Linked/Unlinked trip	An unlinked trip is a passenger trip taken on a single vehicle, such as a single bus ride. Metrorail reports ridership as linked trips. A linked trip is counted every time a customer enters through a fare gate. For example, where a customer transfers between two trains to complete their travel one trip is counted.
Loop	Refers to a portion of a bus line where the driver operates a segment in one direction only. Passengers may only board on one side of the loop. Loops are sometimes required due to lack of pavement accessibility, or when no off street turn-around is available.
Loudoun County Transit	The weekday bus service from Loudoun County, Virginia to Washington D.C., the Pentagon and Rosslyn from stops in Purcellville, Hamilton, Leesburg and Sterling. A reverse commute bus service is provided from West Falls Church to Loudoun County.

---

MARC ( <i>Maryland Area Regional Commuter</i> )	A commuter rail system whose service areas include Harford County, Maryland; Baltimore City; Washington D.C.; Brunswick, Maryland; Frederick, Maryland and Martinsburg, West Virginia.
Metro	The Washington Metropolitan Area Transit Authority.
MetroAccess	The operating unit of Metro that offers service for eligible people with disabilities who are unable to use regular accessible Metrorail, Metrobus and local bus service (fixed route). Federal civil rights legislation passed in 1990 that requires public transportation services to be accessible to, and usable by, persons with disabilities. In compliance, MetroAccess operates a fleet of over 600 vans and sedans. The vans are equipped with passenger lifts and wheelchair tie-downs.
Metrobus	The operating unit of Metro that provides regional and non-regional bus services on 175 lines with 299 route variations throughout the Metro region, utilizing a fleet of over 1500 buses.
Metrorail	The operating unit of Metro that provides heavy rail service over 118 route miles (subway, aerial and surface) and 91 passenger stations with a fleet of over 1100 rail cars.
Modified Accrual Basis	An accounting method that combines accrual-basis accounting with cash-basis accounting. Modified accrual accounting recognizes revenues when they become available and measurable and, with a few exceptions, recognizes expenditures when liabilities are incurred.
MTA ( <i>Maryland Transit Administration</i> )	Refers to the bus, light rail, and subway services in Maryland. MTA also operates the MARC train service.
Multimodal	Refers to the availability of multiple transportation options, especially within a system or corridor. A multimodal approach to transportation planning focuses on the most efficient way of getting people or goods from place to place by means other than privately owned vehicles; by bus, trolley, light rail, streetcar, cable car, and/or ferry systems.
NextBus	Refers to the application that uses satellite technology for Metrobus locations to track the arrival times for bus operators and customers.

---

NTSB <i>(National Transportation Safety Board)</i>	NTSB is an independent federal agency charged with determining the probable cause of transportation accidents, promoting transportation safety, and assisting victims of transportation accidents and their families.
OCC <i>(Operations Control Center)</i>	The operations center that facilitates monitoring and communications for Metrorail operations.
Office	An organizational unit that falls under the structure of a department.
Paratransit	Refers to scheduled service for people who cannot use regular fixed-route bus service. MetroAccess uses vans and sedans to provide this service in the Washington Metropolitan area.
Park and Ride	Refers to the parking facility available for riders at Metrorail stations.
Passenger Lift <i>Also see Kneeling bus</i>	A mechanical device, either a lift or ramp, that allows wheelchair or scooter users, as well as other mobility-impaired passengers, to board a bus without climbing the steps.
Peak Service	Refers to weekday a.m. and p.m. service during commute hours that carries a maximum number of passengers. For Metrorail, peak hours are defined as the time between opening and 9:30 AM in the morning, and between 3 PM and 7 PM at night.
Personnel Services	Refers to expenditure in the operating budget for salaries and wages paid for services performed by Metro employees as well as fringe benefits costs associated with their employment.
PIDS <i>(Passenger Information Display System)</i>	Refers to signs located on each platform and mezzanine of every rail station to provide information to customers including next train's scheduled time of arrival, service delays, elevator outages, and free shuttle arrangements when elevators are out of service.

---

Platform Hours	The total scheduled time a bus spends from pull-out to pull-in at the division. Platform hours are used as a benchmark to calculate the efficiency of service by comparing "pay to platform" hours.
Programmed Reader	A machine that is attached to the fare gate/fare box where magnetic fare media can be read on Metrorail and Metrobus.
Proposed Budget	Refers to the budget prepared with preliminary estimates by the GM/CEO for the consideration of the Metro Board.
RAC ( <i>Riders' Advisory Council</i> )	A committee established by the Metro Board. The council allows Metro customers an unprecedented level of input on bus, rail and paratransit service. The 21-member council includes six representatives from Maryland, Virginia, and the District of Columbia, two at-large members, and the chair of Metro's Accessibility Advisory Committee.
Revenue	An increase in fund assets from operational activity such as passenger fares, parking and advertising.
Revenue Bonds	A bond on which debt service is payable solely from a restricted revenue source.
Revenue Hours <i>Also known as Revenue Service</i>	Refers to all scheduled time bus/rail spends serving passengers, which can also be defined as platform hours minus deadhead and layover time.
Revenue Passengers	Refers to passengers who enter the system through the payment of a fare.
Revenue trip <i>Also see Linked/Unlinked trip</i>	Refers to any linked or unlinked trip that generates revenue by cash payment, use of a pass, and/or any other means of payment.
Ride-On	Refers to Montgomery County regional bus transit system in Maryland.
Round Trip ( <i>Also known as a cycle</i> )	Refers to one inbound, plus one outbound trip (unless a loop route), equals one round trip or cycle.
"Slinky" Bus <i>Also see Articulated bus</i>	Refers to a nickname used by passengers for an articulated bus.



---

SmartStudent Pass	A monthly pass for unlimited travel on Metrobus and Metrorail for students under 19 years of age who live and attend school in the District of Columbia.
SmartTrip®	Refers to a technology built and designed by Cubic Transportation Systems, Inc., a subsidiary of San Diego-based Cubic Corporation to add and deduct value from an electronically encoded card when a rider passes the card near a programmed reader on Metrobus and at fare gates on Metrorail.
Strategic Buses	Refers to spare buses available for service in the event that a bus in route is taken out of service.
Subsidy	Refers to funding received from jurisdictional funding partners in the Washington Metropolitan area consisting of Washington, D.C., suburban Maryland (Montgomery County and Prince George's County) and Northern Virginia counties of Arlington and Fairfax and the Cities of Alexandria, Fairfax and Falls Church.
TheBus	Prince George's County, Maryland local bus service.
TOC ( <i>Tristate Oversight Committee</i> )	The Tri-State Oversight Committee is a partnership between state-level agencies in Maryland, Virginia and the District of Columbia to jointly oversee safety and security at the Washington, DC Metrorail system. FTA assumed Metrorail system oversight from the TOC in October 2015.
Transit Advertising	Refers to ads posted on the exterior and interior of buses and rail cars.
Tripper	A short piece of work (usually on a bus, but sometimes on a train) not long enough to qualify as complete run or full day's work. May involve vehicles from one line or route being re-routed to serve another.
Trunk Line	A route operating along a major corridor that carries a large number of passengers and operates at headway frequencies of 15 minutes or less.
TSI ( <i>Transportation Safety Institute</i> )	A Federal Transit Administration-sponsored institute that conducts a full range of training programs in rail and bus safety and accident investigation.

VRE  
(*Virginia Railway Express*)

The commuter rail service that connects the Northern Virginia suburbs to Union Station in Washington, D. C., via two lines: the Fredericksburg Line from Spotsylvania, Virginia, and the Manassas Line from Broad Run/Airport station in Bristow, Virginia.

WMATA  
(*Washington Metropolitan Area Transit Authority*)

The acronym used for Washington Metropolitan Area Transit Authority serving the Washington Metropolitan area which consists of Washington, D.C., suburban Maryland (Montgomery County and Prince Georges County) and Northern Virginia counties of Arlington and Fairfax and the cities of Alexandria, Fairfax and Falls Church. Also known as Metro.

## Appendix H Glossary of Acronyms and Abbreviations

### A

A&E	architecture and engineering
AA	alternatives analysis
AAI-CAF	(Spanish acronym) manufacturer of the 5000 Series rail cars
AC	air conditioning or alternating current
ACI	automatic car transponder identification system
ADA	Americans with Disabilities Act
AFC	automatic fare collection
AGT	automated guide-way transit
AIM	advanced information management
AIT	Arts in Transit
AP	Accounts Payable
APS	auxiliary power supply
APTA	American Public Transportation Association
ARS	adopted regional system
AST	above-ground storage tank
ATC	automatic train control
ATO	automated train operation
ATD	advanced technology diesel
ATS	automatic transfer switch
AVL	automatic vehicle locator
AVR	automatic voltage regulator
AWP	Annual Work Plan

### B

BAFO	best and final offer
BDA	bi-directional amplifiers
BEAC	budget estimate at completion
BOCC	bus operations control center
BRT	bus rapid transit

### C

CAD	computer-aided dispatch
CADD	computer-aided design and drafting
CAFE	computer authorization for expenditure workflow system
CAFR	Comprehensive Annual Financial Report
CAP	Certified Apprenticeship Program
CCP	communications control panel
CCTV	closed-circuit television
CD	calendar days
CDR	conceptual design review

CFA	Capital Funding Agreement (FY2011-2016)
CIP	Capital Improvement Program
CIWS	customer information web services
CM	construction manager
CMAA	Construction Management Association of America
CMAQ	Congestion Mitigation and Air Quality
CMC	construction management consultant
CMU	concrete masonry unit
CNG	compressed natural gas
COG	(Metropolitan Washington) Council of Governments
COLA	cost of living adjustment
COTS	commercial off the shelf
CPOS	compact point of sale
CRCS	Comprehensive Radio Communications System
CSP	Construction Safety Program
CTB	(Virginia) Commonwealth Transportation Board
CTF	Carmen Turner Facility
<b>D</b>	
D/B	design/build
D/B/B	design/bid/build
DBE	disadvantaged business enterprise
DBFM	dynamic brake feedback module
DCU	door control unit
DEIS	draft environmental impact statement
DPS	drainage pumping station
DRB	Dispute Review Board
DRPT	(Virginia) Department of Rail and Public Transportation
DTP	Dulles Transit Partners, LLC
<b>E</b>	
E&O	errors and omissions
EA	environmental assessment
EDADS	enhanced data acquisition and display system
EIS	environmental impact statement
EMI	engineering modification instructions or electro-magnetic interference
EPA	Environmental Protection Agency
EPM	Enterprise Performance Management
ERRP	Emergency Rail Rehabilitation Program
ETEC	emergency tunnel evacuation carts
ETC	estimate to complete
EV	earned value
<b>F</b>	
FAI	first article inspection

FAST	Fixing America's Surface Transportation Act
FCCI	first car configuration inspection
FDR	final design review
FEIS	final environmental impact statement
FFGA	full funding grant agreement
FFP	firm-fixed price
FHWA	Federal Highway Administration
FIA	fire and intrusion alarm
FMO	financial management oversight
F/O	fiber optic
FRA	Federal Railroad Administration
FTE	full time employee
FTA	Federal Transit Administration
FUA	first unit accepted
<b>G</b>	
GAAP	generally accepted accounting principles
GEC	general engineering consultant
GFOA	Government Finance Officers Association
GIS	Geographic Information System
GMP	guaranteed maximum price
GOTRS	General Order Track Rights System
GPS	Global Positioning System
<b>H</b>	
HCM	human capital management
HEDS	hybrid enterprise document management system
HEOP	Heavy Equipment Overhaul Program
HVAC	heating, ventilation, and air conditioning
<b>I</b>	
IAM	Identity and access management
IAWP	Integrated Annual Work Plan
ICCA	Interim Capital Contributions Agreement
IFC	issued for construction
IFO	Integrated Finance Organization-Finance Project
IFP	Integrated Financial Plan
IGF	internally generated funds
IRP	Infrastructure Renewal Program
ITS	intelligent transportation systems
<b>J</b>	
JARC	Job Access/Reverse Commute
JCC	Jurisdictional Coordinating Committee
JGB	Jackson Graham Building
JOC	Job Order Contracting Program

	JV	joint venture
<b>L</b>		
	LBT	large bore tunnel
	LD	liquidated damages
	LNTP	limited notice to proceed
	LPA	locally preferred alternative
	LRT	light rail transit
	LRV	light rail vehicle
	LUA	last unit accepted
<b>M</b>		
	MAP-21	Moving Ahead for Progress in the 21 <sup>st</sup> Century Act
	MARC	Maryland Area Regional Commuter
	MCC	motor control center
	MDBD	mean distance between delays
	MDBF	mean distance between failures
	MDBS	mean distance between service interruptions
	ME	month-end
	MEAD	Metro Electronic Action Document
	MIS	major investment study
	MMFA	Metro Matters Funding Agreement
	MMMS	Material Maintenance and Management System
	MMP	Metro Matters Program
	MMU	mobile maintenance unit
	MOD	(contract) modification
	MOS	minimum operable segment
	MPS	master program schedule
	MTA	Maryland Transit Administration
	MTTR	mean time to repair
	MWAA	Metropolitan Washington Airports Authority
	MWCOG	Metropolitan Washington Council of Governments
<b>N</b>		
	NCPC	National Capital Planning Commission
	NEPA	National Environmental Policy Act
	NSP	New Starts Project
	NTSB	National Transportation Safety Board
	NTD	National Transit Database
	NTE	not to exceed
	NTI	National Transit Institute
	NTP	notice to proceed
<b>O</b>		
	O&M	operating and maintenance (such as O&M costs)
	OCC	Operations Control Center

---

ODC	other direct costs
OFS	order for services
OTP	on-time performance
OWS	oil water system
<b>P</b>	
PCI	payment card industry
PCO	pending (or proposed) change order
PDR	preliminary design review
PE	preliminary engineering
P/I	policy instruction
PIDS	Passenger Information Display System
PLE	parking lot equipment
PM	project manager
PMI	Project Management Institute
PMO	project management oversight
PMOC	project management oversight contractor
PMP	project management plan
PPE	personal protective equipment
PSS	Program Station Stop, or Public Safety System
<b>Q</b>	
QA	quality assurance
QC	quality control
<b>R</b>	
RAC	Riders' Advisory Council
RCSC	Regional Customer Service Center
RE	resident engineer
RFP	request for proposal
RFQ	request for qualifications
RMS	Records Management System
ROCS	Rail Operations Computer System
ROD	record of decision, or revenue operations date
ROW	right of way
RTU	remote terminal unit

**S**

S&I	storage/service and inspection
SAP	System Access/Capacity Program, or safety awareness program
SCI	substantial completion inspections
SCP	Safety Certification Program
SCWG	safety certification working group
SEP	System Expansion Program
SEIP	System Expansion and Improvement Program
SM	switch machine
SMADS	Station Monitor and Display System (fare collection equipment)
SMS	Safety Measurement System
SOC	station operator's console
SOS	scope of service
SOW	scope of work
SRO	station over-run
SSOA	state safety oversight agency
SSPP	System Safety Program Plan
SSPS	system safety program standards
SSWP	Site Specific Work Plan

**T**

TBS	tie breaker station
TC	train control
TCR	train control room
TIFIA	Transportation Infrastructure Finance & Innovation Act
TIIF	Transportation Infrastructure Investment Fund
TIP	Transportation Improvement Program
TOC	Tristate Oversight Committee
TOD	transit oriented development
TPSG	traction power switch gear
TPSS	traction power substation
TSI	Transportation Safety Institute
TSP	transit signal priority
TUN	temporary user notice

**U**

UPS	uninterrupted power supply
UST	under-ground storage tank

**V**

VE	value engineering
VMS	Vehicle Management/Monitoring System
VRE	Virginia Railway Express



**W**

WBS	work breakdown structure
WMATA	Washington Metropolitan Area Transit Authority
WMS	Warehouse Management System

**Y**

YE	year end
YOE	year of expenditure
YTD	year to date

---

## How to Contact Metro

### ***By mail or in person:***

Washington Metropolitan Area Transit Authority  
600 Fifth Street, NW  
Washington, DC 20001

To reach Metro headquarters at the Jackson Graham Building, take the Red, Green or Yellow lines to Gallery Pl-Chinatown station. Use the Arena exit. Walk two blocks east on F Street to 5th Street. Or, ride Metrobus routes D1, D3, D6, P6, X2, X9, 42, 70, 71, 74, or 80.

### ***By website:***

<http://www.wmata.com>

### ***By email:***

[csvc@wmata.com](mailto:csvc@wmata.com)  
Customer assistance

### ***By telephone:***

#### **Metro General Information**

202-962-1234  
Administrative offices and general information  
Weekdays: 8:30 a.m. to 5:00 p.m.

#### **Customer Relations**

202-637-1328  
Suggestions, commendations, comments

#### **Customer Information**

202-637-7000 (TTY 202-638-3780)  
Metrobus and rail schedules, fares, parking, Bike 'N Ride program, and more

#### **MetroAccess**

301-562-5360 (TTY 301-588-7535) or toll free at 800-523-7009  
MetroAccess Paratransit Service

#### **Transit Police**

202-962-2121